THE

RUSSO-JAPANESE WAR

THE YA-LU

PREPARED IN THE HISTORICAL SECTION OF THE
GERMAN GENERAL STAFF

AUTHORISED TRANSLATION BY

KARL VON DONAT

LATE LIEUT. 33RD (EAST PRUSSIAN) FUSILIER REGIMENT, GERMAN ARMY

Author of "Studies in Applied Tactics"

PREFACE

THIS volume which the German General Staff has named "The Ya-lu" is practically the first instalment of a History of the Russo-Japanese War.

Its contents, highly interesting generally, are also an admirable introduction to the study of a campaign in particular; and as officers are now frequently required to write appreciations of strategical or tactical situations or problems, this book will at the same time probably be found a safe guide for doing so.

The names of towns, villages, etc., except where obvious what place is meant, are spelt in the text the same as on the accompanying maps and sketches, to avoid confusion.

KARL VON DONAT.

LONDON,
February, 1908.

EXPLANATION OF TERMS USED ON THE SKETCHES

Abt. = Detachment, Brigade (if Artillery).
A. K. = Army Corps.
A. O. K. = Army, Headquarters or Staff.
A. R. = Artillery Regiment.

Bhf. = Station.
Btln. = Battalion.
Btlne. = Battalions.
Bttrn. = Batteries.
Bucht = Bay.

d. = of the.

Eisb. = Railway.

Feld = Field.
F. L. = Field Ambulance.
Fest., Festg., Festgs. = Fortress.

Geb. = Mountains.
Gebiet = District, Territory.
Gelb, Gelbes = Yellow.
Gesch. = Gun, Guns.
G. K. R. = Guard Cavalry Regiment.

Hafen = Harbour, Port.
Halb = half.
Halbinsel = Peninsula.
Hb. = Howitzers.

Jagd Kdo. u. = Detachment of Mounted Scouts and.
J. Br. = Infantry Brigade.
J. D. = Infantry Division.
J. K. = Detachment of Mounted Scouts.
J. R. = Infantry Regiment.

Kap. = Cape.
Kas. = Cossack.
Kdo. = Headquarters.
Kette = Chain, Range.
Klein = Little.
Km. = Kilometer, $\frac{5}{8}$-mile.
Kohl. Gr. = Coal Mine.
Kp. = Company.
K. R. = Cavalry Regiment.
Küsten Prov. = Maritime Province.

Luftsch. Abt. = Balloon Detachment.

Masch. Kp. = Machine Gun Company.
Meer = Sea, Ocean.
Minen Kp. = Mining Company.

N. (n.) = (on a road) to.

Ost = East.

P. K. = Engineer Company.

Rücken = Ridge, Range, Back.

Sap. Kp. mit Jng. Dep. = Sapper Company and Engineer Depôt.

Sch. = Rifles.

Sch. A. B. = Rifle Artillery Brigade.

See = Lake (inland), otherwise Ocean, Sea.

Schtz. = Rifles.

S. K. = Bearer Division.

Stein Kohle = Coal.

Tal = Valley.

Tauben = Pigeon.

u. = and.

v., von = of, from (alongside a road).

TABLE OF CONTENTS

LIST OF THE MAPS

(IN POCKET AT END)

THE RUSSO-JAPANESE WAR

I

EVENTS LEADING TO THE WAR

WHEN, in 1853, the American Commodore Perry forced Japan into signing a treaty of commerce after she had for centuries declined to take part in any international trade, nobody probably foresaw the momentous changes which were thereby inaugurated. For, although the struggle between the traditional mode of life and government and the advance of European civilisation continued to last for more than a decade, yet, by the opening up of the first treaty ports, a path was struck from which there was no return. Japan had but one choice, either to remain inactive in the face of progress of European civilisation and power, like her Chinese neighbour, or to boldly take up the struggle for existence by adopting the means on which the superiority of the white race is based. More far-seeing and more active than the other Mongolian races, the Japanese decided for the adoption of European forms of civilisation. The victory of the New over the Old became final

Japan develops into a modern State.

Sketch 1.

when, in 1868, the Shogun government of the Tokugawa family collapsed, which for some 267 years had directed the affairs of the country. The Mikado Mutsuhito, who had just then ascended the throne, gave up the seclusion of his predecessors, and proclaimed to his people his intention of assuming himself the reins of government, of improving administration, introducing useful knowledge of other countries, removing abuses, and, finally, of summoning his people to participate in the government of the country.

This comprehensive plan Japan has realised in twenty-two years, in spite of all obstacles and opposition. First of all, the ancient feudal system had to give way. By it the country had been divided into nearly three hundred provinces governed by almost independent feudal lords, and a uniform government had become impossible. A strictly centralised administration after the European pattern, and a well-defined organisation of all classes of the population, replaced the feudal system. Next, the system of education was newly organised with the aid of European instructors, trade and industry were promoted, and the achievements of European culture were made to serve the objects of Japan by every possible means, but at the same time all was carefully preserved that was good and useful of native institutions. The crowning of all was the promulgation in 1890 of the promised constitution, which after years of thorough study was designed after the German pattern, and the opening of the first Parliament on November 25.

It was entirely in agreement with the martial

traditions and the clearly discerned interests of Japan when, along with this transformation of civic institutions, a complete reorganisation of the national forces was progressing. With the co-operation of French, and afterwards German officers, and by basing army organisation on German types, the Japanese, in place of the ancient feudal levies, created in a comparatively short time a numerous, well-armed, and well-trained army, while the navy was developed after the English pattern, and with the aid of English instructors.

Japan's relations with Korea.

Having dropped her timid seclusion from the outer world, Japan, sooner or later, was bound to assert her authority also abroad. The growing weight of taxation arising from the expenditure for civil service, for the army, and for the navy, and her rapidly increasing population,[1] forced Japan to find new markets beyond the limits of her island empire, and room for the employment of her surplus population. For this purpose no country was more favourably situated than Korea; ancient connections and traditions pointed to that country.

Korea, the smallest, the least populated, and the least developed of the three Mongolian Empires of the Far East, had for centuries secluded herself much stricter than China or Japan. At the time when Japan opened her ports to the foreigner, Korea successfully defied all attempts of the United States and France to enter into negotiations. Even intercourse with Japan and China, who in former times had alternately interfered by force of arms

[1] Japan's population has increased by ten millions since the beginning of the Meiji era (1868).

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

with the affairs of Korea, became more and more restricted. Diplomatic relations with Japan had already ceased for years; Fusan was the only place where there was some lingering trade still. It is true an embassy was sent to China annually with the customary tribute, but for the rest Korea's seclusion from China was almost complete as well. Relying, however, on the fact that tribute was paid to her, China upheld her claims to suzerainty over Korea, while Japan wished to see Korea treated as an independent State. For in the face of Korea's helplessness and China's weakness, it was sure not to be difficult for Japan to jockey an independent Korea according to her own sweet will, and to monopolise Korean trade by virtue of her advantageous geographical position and the ability of her merchants and tradesmen.

Japan therefore resumed diplomatic relations with Korea in 1868, and her agents succeeded in slowly but surely increasing her influence. In 1876 Korea had to sign a treaty of friendship and commerce which prepared the way for the opening up of the country for trade with Japan and the other Powers.

The incessant and violent party strifes of the Koreans, in which Japan of course was always on the side of the few who were in favour of reform, and China on the side of the conservatives, gave, in 1882, Japan the opportunity of enforcing the permission of maintaining a small force in Söul, whereupon China, as a matter of course, sent some troops to Korea too. In a military revolt in 1884, which must be looked upon as a counter-

move to a *coup d'état* which had been arranged by the friends of reform in league with the Japanese, these latter were driven from Söul by Korean and Chinese troops. Demanding satisfaction for this insult, Japan enforced the Treaties of Tsche-mul-po and Tientsin with Korea and China respectively, which stipulated that China and Japan were to withdraw their troops from Korea, and only send there any in future at the request of Korea, and after mutual agreement.

Outbreak of the Chino-Japanese War in 1894.

The state of affairs created by these treaties lasted nearly nine years, although during that time neither Korean party strife nor the diplomatic fencings between the Chinese and Japanese envoys came to an end. The Chinese, supported by the powerful conservative party, generally asserted a greater influence on the destinies of Korea quite out of proportion with their actual power. But when in 1894 the Tonghak sect was driven to revolt by the misrule of Korean officials, the war broke out between China and Japan which had been threatening once before in 1884-5.

China and Japan send troops to Korea.

China, at Korea's request, had sent a small body of troops and some warships to that country. But as the stipulated notification by China of this fact again contained a claim of suzerainty over Korea, Japan entered a protest and, without delay, dispatched a mixed brigade for the protection of her embassy and subjects, as well as for participation in the suppression of the revolt. China declined the latter, and demanded that no Japanese troops were to enter the interior of Korea.

During these negotiations the Japanese brigade

began to land on June 12. Korea's efforts to induce Japan to recall her troops had as little success as the proposals for reform with which Japan then approached Korea and China; nor were the good offices proffered by the neutral Powers of any avail. China declined to negotiate until the Japanese troops had withdrawn.

The Japanese occupy Söul and drive the Chinese from Korea.

Meanwhile 4,000 or 5,000 Chinese, who had landed in Korea, remained inactive at Asan, while the Japanese mixed brigade was in the immediate neighbourhood of Söul, occupying Tsche-mul-po, the port of Söul. On July 23 Japanese and Korean troops came to blows near Söul. The Koreans were easily beaten and driven from Söul, whereupon Japan induced the helpless king to summon a new ministry and issue a declaration of independence, Japan herself undertaking the care of removing the Chinese troops.

Thus war had broken out between China and Japan. Japan, with the sound organisation of her army and navy, was thoroughly prepared for it. She had, moreover, mobilised in good time before the outbreak of hostilities three divisions of her land forces and her whole fleet, and had put her coasts in a state of defence.

On the other side, the troops of any military value for active service which China could marshal were merely the badly armed and ill-trained contingents of the governors, about 60,000 strong. Her Northern Fleet, which alone had to be reckoned with in a naval war, numbered a few battleships superior to those of the Japanese, an advantage, however, which could hardly make

itself felt owing to the inferior quality of their crews. China's preparations for war were badly in arrear from want of organisation and want of zeal of some of her governors.

The situation being as it was, the objects of Japanese strategy were plain: driving the Chinese from Korea, establishing command of the sea, and then, after opening the shortest route across the Yellow Sea, attacking the heart of Chinese power—that is to say, the province of Tschili and Peking.

As a preliminary step, the further growth of the Chinese forces assembled in Southern Korea was prevented by the Japanese fleet defeating three Chinese men-of-war on the west coast of Korea, and sinking one warship and one transport. Then the Japanese mixed brigade attacked the Chinese, who were concentrated at Asan, and defeated them at Söng-haan on July 29 so thoroughly that this body ceased to exist.

Next, not heeding the inactive Chinese fleet, the 10th Japanese Brigade was, up to the middle of August, transported to Tsche-mul-po, and the 5th to Gensan. Then, during the first days of September, the portions of the three brigades in Korea not wanted as garrisons advanced under the command of General Count Yamagata on Pyöng-yang, where Chinese forces after landing in Northern Korea had united with some of the troops who had escaped from Söng-haan, and with some others who had hurried up from the Ya-lu. After three days' severe fighting the Japanese, converging from Gensan and Söul, succeeded in driving the Chinese from their naturally very

strong position. They hurriedly retreated to the Ya-lu.

Shortly afterwards, on September 17, the Japanese fleet met the Chinese not far from the mouth of the Ya-lu, the Chinese having appeared in the Bay of Korea with the object of covering the landing of transports. An action ensued in which the Japanese, though not gaining a decisive victory over the superior Chinese ironclads, nevertheless destroyed five more Chinese warships, and caused the remainder to retire to Port Arthur.

At the beginning of October the Japanese army, which had been brought up to the strength of two divisions, followed the Chinese to the Ya-lu, and on the next two days after its arrival forced the passage over the broad, lower course of the river held by the Chinese, the Japanese of the right wing fording it above Wi-tschu, and advancing south on its right bank. The Chinese were then driven away without difficulty. On the following night a bridge was thrown across the river, covered by batteries built on the left bank, the Chinese not interfering, and then the army crossed. The Chinese position was attacked, and after a brief action the defenders hurriedly retired on Hai-tschön and Siu-yan. The Japanese at once followed as far as Fön-huan-tschön and Da-gu-schan, and then afterwards gradually as far as Lan-san-guan and Hai-tschön.

As the Chinese fleet no longer showed fight, the Japanese were obliged to try and establish command of the sea by capturing the naval bases of

Port Arthur and Wei-hai-wei. With this object a second army of one and a half divisions, under General Oyama, and a siege train of 42 guns was landed mostly at Pi-tsze-wo at the end of October, protected by the fleet which was cruising off the Chinese naval ports. Without encountering any resistance on the Isthmus of Kin-tschou or Ta-liën-wan, the Japanese army on November 18 appeared before Port Arthur, from which the Governor and the fleet had departed (the latter to Wei-hai-wei), while the garrison, completely disorganised, had remained behind.

The Japanese gain command of the sea and capture Port Arthur.

The Japanese had thus an easy task. Their siege artillery opened fire on the morning of the 21st, and within an hour a fort on the north-west front was captured. From the fort they rolled up in an almost uninterrupted advance the whole of the Chinese fortifications, the fleet meanwhile demonstrating against the coast defences. On the morning of the 22nd all works were in the hands of the Japanese. The capture of this most important naval port from their opponent cost the Japanese merely 400 men.

While the 1st and 2nd Armies were now enjoying a period of rest in their winter quarters, the fleet and a newly formed portion of an army immediately set to work to capture Wei-hai-wei. That naval port was very strongly fortified on the coast-line, but insufficiently inland. In addition to the Chinese fleet, which was still formidable on account of the number and class of its ships, there were some 9,000 or 12,000 land troops.

The capture of Wei-hai-wei.

The Japanese assembled this new army of one

and a half divisions at Ta-liën-wan in January 1895, which, under the command of the leader (till then) of the 2nd Army, was to capture Wei-hai-wei, and, escorted by the fleet, crossed it over to the Jung-tschöng Bay on the eastern coast of Schan-tung, the transports starting on January 19. This force was able to advance on Wei-hai-wei as early as the 26th. The army arrived in front of the fortress on the 31st, and immediately, almost without fighting, took possession of the forts on the eastern front. On the succeeding days the army turned the fortress on the south, and on February 3, after the garrison had withdrawn to Tschi-fu, occupied also the western front and the town itself.

With the object of reducing the Chinese fleet and the coast defences still held by the Chinese—both having taken scarcely any part in the fight so far—the Japanese warships now came into action too. Japanese torpedo-boats entered the port and destroyed several Chinese ships during the nights of February 4-5 and 5-6. On the 7th the fleet began to bombard the sea-forts and what there was left of Chinese ships. One fort was placed out of action, the garrison of another mutinied, one more cruiser was sunk, and the torpedo-boats in their attempt to leave the port were mostly captured. Finally, on February 12, the fleet and the works which were still holding out capitulated.

The Japanese had thus become masters of all the coast defences which had been designed to protect the entrance into the bay of Tschi-li.

Their fleet had gained considerably in strength by the captured ships, and their naval supremacy could no longer be disputed.

In fact, this decided the war; for the Chinese were altogether unable to offer any resistance to an impending attack on Tschi-li. Immediately after the fall of Wei-hai-wei they resumed negotiations with Japan which led to an armistice at the end of March. This put an end to the operations in Manchuria, which were carried on there during the first months of 1895 and had no influence upon the issue of the war. In the middle of April the Peace of Shimonoseki was signed. By it China ceded to Japan the Liao-tung Peninsula, the Pescadores Islands, and Formosa, recognised the independence of Korea, and promised to pay a war indemnity, Japan being allowed, until it was paid, to retain possession of Wei-hai-wei. Through the intervention, however, of Russia, France, and Germany, whose interests were affected by this sudden growth of Japanese power, Japan was obliged to restore to China the Liao-tung Peninsula, which was by far her most important acquisition.

The Chinese begin to negotiate. End of the war.

This failure did not cause Japan to give up her plans; she merely deferred them. Mortification and mature reflection made government and people cling with unparalleled tenacity to the one object of obtaining the hegemony over the Mongolian races of the Far East, and to exert for almost a decade all their powers in preparation for the fight without which the realisation of such plans could never be thought of.

Russia's position in Eastern Asia.

Events after the Peace of Shimonoseki had left no doubt that it was Russia alone, and not China, who could dispute with Japan for the supremacy in Eastern Asia.

The growth of Russia's power in Eastern Asia can be traced as far back as the seventeenth century. The dominions which she gradually acquired on the Pacific suffered, however, alike with the coasts of her European motherland, from the fact that their ports, owing to the ice in winter or their secluded positions, were of little use for competing in international commerce. The same efforts for obtaining an ice-free access to the open sea can therefore be traced in Russia's East Asiatic politics as they can for centuries in her European politics. Count Murawiew's acquisitions, the creation of Vladivostok, the occupation of Sachalin in defiance of Japan, brought Russia nearer to her goal, but were no satisfactory solution of the question. Nothing but a completely ice-free port in the Yellow Sea, beyond Japan's control, could satisfy Russia's objects.

The want of suitable access to the high seas was felt by Russia in the last decade of the nineteenth century the more acutely as she then began to look upon her Asiatic dependencies no longer as a useless appendix, but as colonies with a bright future—a change of view which found expression in the gigantic enterprise of the Siberian Railway, the construction of which began in 1891.

Under these circumstances it is intelligible that Russia, jointly with France and Germany, objected to being debarred for ever from access to the coasts

of the Yellow Sea by the establishment in Liao-tung of an ambitious State powerful alike on land and sea. After the Peace of Shimonoseki, Russia used her influence over China—by this interference enhanced—to obtain from the helpless Tsung-li-yamen permission to continue the Transbaikal Railway right across Chinese territory in a straight line to Vladivostok. This made communication shorter and cheaper, and Russia moreover got a firm hold on Manchuria, since constructing and working this "Eastern Chinese" Railway without military protection was a thing impossible to imagine. Finally, in 1898 Russia obtained under the guise of a lease the cession of the Kwan-tung territory—that is to say, of the southern portion of the Liao-tung Peninsula with Port Arthur and Ta-liën-wan. China permitted Russia in addition to connect this, her recent acquisition, by a line with the Eastern Chinese Railway.

Russia establishes herself in Manchuria. Acquisition of the Kwan-tung territory.

The long-cherished wish for an ice-free access to the ocean was thus at last fulfilled. The Russian navy gained in Port Arthur a *point d'appui* which far more deserved the proud name of mistress of the East than the former seat of Russian naval power in Eastern Asia. It was now possible to construct at Dalni in the Ta-liën-wan Bay for Russian commerce a port which, in conjunction with the southern branch of the Eastern Chinese Railway, gave excellent opportunities to imports to, and exports from, the vast Manchurian and Siberian hinterland.

The acquisition by Russia of the Kwan-tung territory was felt in Japan as a national humiliation,

for it was Port Arthur that had been the prize of victory in the Chino-Japanese War. And now it was that that bitter hatred against the Russian rival arose which animated the Japanese people to an ever-increasing degree, and made them capable of bearing any sacrifice, but at the same time also rendered the Government's cautious policy occasionally very difficult.

Further progress of the Russians in Manchuria and Korea.

Having taken possession of Kwan-tung, it was necessary for Russia to establish connection between her newly acquired territory on the one hand, and Siberia and her second railway terminus and naval port, Vladivostok, 1,000 kilometres (625 miles) distant, on the other. In this way Korea and Manchuria gained an enhanced importance for Russia. But in both these countries her interests were opposed to those of Japan, who could never allow Korea to become a dependency of Russia, nor be a party to the disintegration of China.

The reform party in Korea, which Japan had secured in office, had, in the years following the Chino-Japanese War, proved powerless to carry any reforms beyond the sphere of influence of the Japanese troops, who had remained behind for the protection of the legation and telegraph line from Fu-san to Söul, nor had that party been able to stamp out the bloody party strifes which distracted the country. The opposite party naturally looked to Russia for support after China had finished her part in Korea. The ruler himself sought refuge from the molestations of the parties in the Russian Legation in 1896, and remained within its walls for

a whole year. In spite of an extensive Japanese immigration, of lively commerce with Japan, and in spite of the presence of Japanese troops in Korea, Russian influence continued to grow steadily, which among other facts became apparent by the temporary employment of Russian officers and civil servants, by the granting of valuable concessions for exploitation of the forests on the lower Ya-lu, and by the plan—foiled, however, by the Japanese—to create a Russian naval base at Masan-po.

Russia brought the Manchurian hinterland of Kwan-tung incidentally under her sway at the time of the Boxer disturbances in 1900 by marching strong detachments of troops into Manchuria for the protection of the railway and suppression of the revolts, which were threatening also Russian territory. When the Chinese troubles came to an end, these troops remained in Manchuria, and the negotiations with China concerning the evacuation of Manchuria clearly showed an endeavour to avoid, if possible, altogether the withdrawal of the troops. But as it was impossible to carry out this intention without coming into conflict with the other Powers, Russia herself proposed, in April 1903, to commence with the evacuation of Manchuria on October 8, 1903, and to complete it within a year. In the draft of the treaty she secured herself sufficiently against the intrusion of any other Power into Manchuria, and against the exploitation in commerce and mining of this rich province and of adjacent Mongolia by any other but Russian subjects.

The Japanese prepare for war with Russia.

While these events were in progress Japan maintained a strikingly reserved attitude, evidently with the intention of finishing first the entire reorganisation of all her military and naval forces, which she had begun after the Chino-Japanese War, before she would open the great question of supremacy in the Far East. Japan allowed Russia to establish herself on the Kwan-tung Peninsula and in Manchuria without protesting seriously, nor did she at all energetically oppose the growing influence of her rival in Korea. One event only made it clear that Japan was not inclined to give up her plans on the Asiatic continent, or to take calmly the threatening supremacy of Russia in China and Korea; this was the conclusion of the Anglo-Japanese alliance in 1902. By it Japan secured England's aid in case a third Power should step in while Japan was at war in Eastern Asia, and covered herself against surprises such as were prepared for her after the Peace of Shimonoseki.

Diplomatic negotiations before the outbreak of the Russo-Japanese War.

It was only when, at the end of 1902, the strengthening of the Japanese army and navy had been completed, and Japan could believe herself to have now the ascendancy over Russia's East Asiatic forces, that Japanese diplomacy began to show a more determined front. In July 1903, the Japanese Foreign Office caused negotiations to be commenced at St. Petersburg with the object of regulating affairs in Korea and Manchuria. Japan chiefly stipulated for the following:

Reciprocal recognition of China's and Korea's independence and inviolability;

Recognition of Japan's preponderating interests in Korea, and Russia's special interests in Manchuria;

Russia to engage to send no more troops to Manchuria than is justified by the actual want in case such troops are necessary for protection of the railway, and Japan to engage to do the same in regard to Korea; both engage to recall their troops immediately after the object has been attained;

Open door for Japanese enterprises in Manchuria, and for Russian in Korea.

The settlement of these questions was constantly deferred by Russia, apparently with the intention of employing the time thus gained for further strengthening her military position in Eastern Asia; for, among other things, it was not till the end of 1904 that the last portion of the Siberian Railway, the portion turning Lake Baikal, was expected to be completed. When Russia had at last to meet Japan's urgent requests and come forward with counter-proposals, she demanded elimination of the whole Manchurian question and recognition that this province was outside the Japanese sphere of interest. To this Japan did not agree, as she had made up her mind to settle once for all the whole of Eastern Asiatic affairs. Repeated proposals and counter-proposals saw the year 1903 pass by without Russia treating the matter of the promised evacuation of Manchuria at all seriously. On the contrary, she hastened to augment her East Siberian troops, and made preparations for the dispatch of naval reinforcements which jeopardised the

numerical superiority of the Japanese fleet. Moreover, a Russian company, formed with the object of exploiting the concessions in the forests on the lower Ya-lu, displayed a feverish activity on the border there. The Japanese Government clearly saw that any further delay would imperil the military and naval superiority established after eight years of hard work. The Government could, besides, with difficulty only resist the pressure of warlike sentiment of Parliament and people, and therefore, on January 30, categorically demanded at last, from the Russian Foreign Minister, to know when the Russian reply to Japan's proposals, which had been handed over on January 13, would be received. As the Minister would not mention a definite date, and as Russia's answer had not been transmitted up to February 5, Japan recalled her Ambassador from St. Petersburg. An attempt on the part of Russia to have her reply-note handed in by her Ambassador in Tokio at the last moment was frustrated by the Japanese.

Although by this procedure the possibility of a peaceful settlement had not entirely vanished, yet the whole action of Japan permitted of no other interpretation but that she wished for war. And so the decisive struggle for supremacy in the Far East began before either party issued any formal declaration of war.

II

THE THEATRE OF WAR

THE Russo-Japanese War is one of the few wars conducted entirely beyond the proper dominions of both belligerent powers. The dominions themselves can only be considered as the base of operations in a general sense, merely as the source of power of the armies and navies engaged. The operations were conducted on Korean and Chinese soil without these States even trying to preserve the inviolability of their territories. That the theatre of war was on the whole confined to Southern Manchuria, east of the railway from Schan-hai-kwan to Sin-min-tun, resulted from the voluntarily self-imposed limitations of both belligerents, who both, at the initiative of the United States of America, declared their willingness to respect Chinese neutrality so long as the opponent would do the same. An exact demarcation of neutral territory was never attempted, nor were both adversaries (in view of China's military impotence) shy enough not to violate neutrality occasionally. General Ma's Chinese troops, which were stationed in Mongolia to ensure neutrality, did not, at any rate, prevent any such violations.

War is conducted outside the borders of both countries.

Sketches 1 and 3.

The possibility of Japan itself becoming the theatre of war was from the outset almost beyond question, owing to its insular position, the configuration of its coast, and the nature of the country. Mobilisation of army and navy could be effected in perfect comfort and security; so also the preparations for the naval operations and transport of the army to the continent.

Naval operations easy for Japan.

Naval operations or expeditions beyond the sea are greatly facilitated by Japan's geographical configuration. Just where the Asiatic continent approaches to within 200 kilometres (125 miles), the Japanese group of isles (the islands of Nippon, Shikoku, and Kiushiu) form an inland sea, the numerous bays of which afford protection to the largest fleets of warships and transports. On the narrow Straits of Korea, which separate Japan from the continent, are the prominent, well-protected, and ice-free naval ports of Japan (namely, Shimonoseki, Saseho, and Nagasaki), whence steamers can reach the Korean coast within eight or ten hours. Half-way the fortifications of Tsujima Island afford them protection against any danger. Even an enemy superior at sea would find it difficult to stop any traffic with the continent, especially when his naval bases, like those of the Russians, are thirty hours' steaming from the decisive spot.

The Japanese and Yellow Seas, over which the road of the Japanese ships passes to the east and west coasts of Korea and to Manchuria, and which were bound to become the theatre of war for naval supremacy, are not without danger to navigation;

the heavy gales particularly, which during winter blow from the steppes of the Asiatic continent, are much dreaded. Their waters are difficult to navigate, especially on the Korean coast, and are not sufficiently surveyed. In spring and summer dense fogs frequently hamper navigation. These are difficulties which were bound to be felt much more by the Russian sailors coming from Europe than by the Japanese, who were familiar with every portion of the Eastern seas. Moreover, the central position of their naval ports, on the narrow channel between the two seas, half-way between the Russian naval bases, which were separated by 2,000 kilometres (1,250 miles) of steaming, and the unfavourable local character of these Russian ports as well, were all in favour of the Japanese in any naval action.

Korea's coasts.

In all her military operations on the continent Japan invariably planted her foot first firmly on Korean soil.[1] The easiest and quickest way to do so is, of course, on the southern coast, which is the nearest to Japan; it is well furnished with numerous bays, estuaries, and islands covering their entrances, and has many good and safe anchorages. Of these, Fusan served the Japanese from ancient times as a trading settlement and pivot in her wars in or against Korea. Fusan harbour, as well as the particularly comfortable and safe one of Ma-san-po, allows even large ships to land. The numerous other anchorages formed by islands and peninsulas on the south coast are of

[1] Korea is, roughly, 218,000 square kilometres (86,000 square miles) in extent, and is said to have over 10,000,000 inhabitants.

less value for landings, and serve more as places of rendezvous in naval operations. The whole south coast is ice-free.

In addition to these near and always safe landing-places, the Japanese had, however, to fix their eyes from the outset on the harbours situated farther north on the east and west coasts of Korea, and from which there were not hundreds of miles of bad roads to be covered to the Manchurian border.

The conditions are less favourable for landing there. The channels on the east coast are certainly good, and deep everywhere; there is not much ice, but the coast has few indentations, and is very steep, owing to the close approach of the mountains to the sea. The coves (mostly shallow) afford little protection against the wind and currents. Most of the landing-places in North-eastern Korea are, moreover, very indifferently connected with the interior. The most useful harbour of the whole eastern coast, as regards facilities for landing and communication with the hinterland, is Gensan, on the Bay of Lazarew; but even from there indifferent roads only lead over the mountains to Söul and to the Söul—Wi-tschu road.

Korea's western coast, with its numerous bays, estuaries, peninsulas, and insulas, is, again, more like the southern coast. The sea, however, especially on the northern portions of the west coast, is so shallow that at low tides (which follow the here extraordinary high tides) vast stretches of muddy bottom are laid bare. The river courses are frequently silted; their channels, still navigable at

low tide, are irregular, and frequently change their course. Harbours can be entered mostly at high tide only. Nevertheless, Tä-tong Bay, Asan Bay, and the roadsteads of Tschi-nam-po, Tsche-mul-po, Kun-san-po, and Mok-po afford safe anchorages even to large ships, but only miles away from the shore as a rule. Even boats can only get at high tide close in-shore. The Koreans are, therefore, accustomed to bridge the muddy bottom during low tide with narrow piers made of stones and planks, which they bring along with them, and thus obtain connection with the shore. Landing on the Korean coast is, under these circumstances, an exceedingly tedious affair. It is said that it took the Japanese divisions landing there at the beginning of the war eighteen days to complete their entire disembarkation.

The interior of Korea

Not only the coast, but also the interior of Korea presents many difficulties to an invasion, these being due, chiefly, to the mountainous character of the country, especially of its northern portion.

A continuous range starts from the Pek-tu-san, 2,440 metres (8,125 feet) high, to the Korean east coast, and then stretches along it as far as the south coast of the peninsula. The Tu-men chain, branching off from that range, fills up the province of Ham-ky-öng, which projects towards the Russian maritime territories, while numerous other ridges trend towards the Yellow Sea in a westerly and south-westerly direction, or, bending like a knee, run parallel with the main range. All these ranges do not form a particularly high mountainous country, but one which very much restricts view

and movement, and leaving not much room for level country on the west and south coasts.

The main ridge north of the roads from Gensan to Pyöng-yang is 1,200 to 1,800 metres (4,000 to 6,000 feet) high, descending thence towards the south. The slope facing the Japanese Sea is rugged and steep; numerous transverse ranges render communication along the coast difficult. On the west the descent is gentler, the mountain ranges gradually merging into a hilly country. The ranges are mostly separated by narrow, deep valleys with steep slopes. Crossing such a valley means always passing considerable differences of level.

The mountain chains of Northern Korea and the elevated plateaus between them are mostly covered with dense forests. The Korean-Manchurian borderland between the Ya-lu and Tu-men, the Tu-men range and the Ton-nä-kang, is an almost uninterrupted virgin forest, reaching north as far as the town of Hoi-ryöng. In Central Korea rugged, rocky, bare hillocks alternate with round, steep-edged, wooded heights and green cultivated mounds. The south of the peninsula is poor in forests.

Owing to the position of the main range most of the rivers, apart from those on the border, flow towards the Yellow Sea and the Straits of Korea; while unimportant brooks only run into the Japanese Sea, forming an obstacle to communication on account of their deeply cut beds. On the western and southern sides there are several respectable rivers between the mountain chains, such as the

Han-kang flowing past Söul, the Tä-tong-kang, and others. The Korean rivers, in their upper reaches, have mostly strong currents, deeply cut banks, and an irregular bed broken by rapids and huge boulders, the bottom of the valley in the lower course widening, and the river mouths enlarging into lagoons. The larger rivers thus form considerable obstacles, especially in Northern Korea. Navigation on the rivers is impeded by the often insufficient and fluctuating depth of their waters, by mud deposits, by bars at the mouth, and by the ice which, in the north, covers the rivers for some three or four months in the year. Nevertheless, on the lower courses of the larger rivers junks are plying, and on the Han-kang even small steamers. The rivers are therefore of some value to trade in peace and for supplying an army operating in Northern Korea.

The number and condition of the country roads are far less satisfactory. Being almost all purely natural tracks, they are rarely passable for the European kind of vehicles and guns, and in the mountains dwindle to mere bridle-paths 30 to 40 centimetres (1 to $1\frac{1}{3}$ feet) wide. The so-called high roads are distinguished from the ordinary roads merely by their greater breadth, and a somewhat more comfortable transit over the inequalities of the ground. The condition of the roads and paths depends on the season; many are simply impassable during the rains in spring. Road-bridges are unknown, ferries scarce and bad, but most of the rivers can be forded at numerous places except in the rainy season. Passage over

the various mountain ranges is effected by miserable bridle- and foot-paths leading mostly over the natural saddles. In the North Korean wooded district roads are especially scarce and bad, and frequently barred and entangled by fallen trees.

The whole forest district, therefore, and a large portion of the rest of the mountainous country, are unsuitable for extensive military operations, there being no roads for the movements of troops, nor for their trains, which, if ever, are indispensable in just such a district. This is probably one of the reasons why the Japanese confined their movements in 1894 to the west coast, and only sent a small detachment from Gensan to Pyöng-yang. Extensive operations through Northern Korea against the Russian coast districts or North-eastern Manchuria are as prohibitive as any such offensive movements thence to Korea.

Traffic, in peace, also follows the west coast. Its main arteries are the three roads leading from the south to Söul and the Pyöng-yang—An-tju—Wi-tschu road. The latter forms the natural line of operation for all expeditions from Korea against Southern Manchuria and the Liao-tung Peninsula, or *vice versa*. Its exceedingly steep gradients, its carriage road broken by holes and pits and strewn with boulders, had in 1894 already delayed the Japanese advance. Officially it is declared by the Japanese to be the best in Korea, but practicable for vehicles under certain conditions only.

The disturbed state of the country and the opposition of the Koreans against all innovations had hitherto prevented the construction of railways,

which to some extent would have made the transport of supplies independent of the roads. Merely the short line of railway Söul—Tsche-mul-po was opened. The Fu-san—Söul railway, 850 kilometres (530 miles) in length, and of such great importance to the Japanese, was being constructed when the war broke out; it was doubtful whether it could be completed during the war.

For the moment operations in Korea could only reckon with the native means of transport—carriers, pack animals, and two-wheeled carts drawn by men or beast, the carts being generally suitable only in the flat coast districts. Under such conditions infinite difficulties arise in bringing up supplies; even a small army would need an immense train, hampering all operations.

West and South Korea furnish plenty of supplies. Every suitable spot being made to serve agriculture, and the population's wants being not very great, a considerable surplus of rice, grain, and vegetables is produced in normal seasons, and finds its way to Japan and China. Pigs only, but these in large numbers, are available as animal food, because the Koreans, in addition to dogs, eat only pork. The sea provides ample fish.

So long, therefore, as an army operating in Korea confines its movements to the south and west, it can draw its victuals to some extent from the country. In the north and east, however, apart from some narrow strips of coast, an army is entirely dependent on the supplies which it is so difficult to bring up there.

Owing to its low state of civilisation the country

is unable to contribute anything worth mentioning to the other wants of an army. Even billeting would cause difficulties. The miserable, low, and narrow mud-huts in which most of the people dwell are, alike from their nature as well as by their numbers, unsuitable for quartering troops. The filth prevailing in them and in the surrounding yards, and on the roads, is a positive danger to the health of the troops. The towns are distinguished from the villages merely by their larger size and by a wall surrounding them in the form of a square, which provides them with a certain though limited amount of defensive capability.

Korea's climate.

In spite of its southern situation—Söul is on the same latitude as Tunis—Korea has a considerably rougher climate than most of Japan. South Korea alone, owing to the influence of the sea, enjoys an almost subtropical climate with a mild winter and a warm rainy season lasting from April to July. Central Korea and the north are rougher on account of their mountainous character, and in winter are moreover under the influence of cold winds blowing from the continent of Asia, so that during the winter months severe frost and plenty of snow are the rule. All the rivers and streams of the western coast are frozen over from November till March. The heat in summer is tempered by winds from the sea, which bring ample rain to the country in July and August. Nevertheless, very high temperatures do occur.

Of climatic diseases can be mentioned only malaria, which is indigenous to the rice districts; but on account of the bad system of habitation

and of the customary uncleanliness, tuberculosis, cholera, small-pox, and, it is said, leprosy, too, are not infrequent, and turn into devastating epidemics after bad harvests.

The Korean population.

Both belligerents had no need to pay much heed to the inhabitants of Korea. Although on account of their fine physique, their docility, their endurance and perseverance under hardships they might become useful soldiers, yet as a people they are unable to offer open resistance to an invader. They are not only without any kind of military organisation, without leaders and arms, but from centuries of mis-government the Koreans are also devoid of any national feeling, thus causing them to suffer the horrors of war on the invasion of foreign armies with the same equanimity as the oppressions of their officials in peace time. And so, apart from occasional molestations on the line of communications by Tonghaks, no resistance was offered to the first Japanese invasion in 1894–5, and since the Korean Government had not grown stronger during the decade following the Chino-Japanese War, it was expected that no difficulties would arise from the population this time.

Either of the belligerents who entered the country could therefore make use of its limited resources, but at the same time had to make the best of the many difficulties presented by its nature as well. Korea being one of the main objects of the war, its occupation was a matter of course for Japan, and was in so far indispensable as the peninsula forms an almost safe connecting-link for the Japanese with their home country, and, more-

over, would afford the means of escaping pursuit by the victor should operations take an unfavourable turn.

The Korean-Manchurian frontier.

The Tu-men, the Ya-lu, and the mountain cluster of the Pek-tu-san where both these rivers have their sources, form Korea's boundaries towards Manchuria. As a means of communication as well as a frontier-line the Ya-lu, 510 kilometres (320 miles) long and always with plenty of water, is the more important of the two rivers. In its upper reaches, as far as Mau-örr-schan, it is a swift mountain river, closely encased in a deep valley with steep slopes and surrounded by a dense virgin forest. Operations across this portion of the river are out of the question owing to the poverty and inaccessibility of the whole district. Below Mau-örr-schan the bottom of the valley is certainly broader, well cultivated and populated, but the river being nowhere bridged forms a powerful obstacle by its great width—160 to 530 metres (180 to 590 yards)—its rapid current, and wooded banks which rise as much as 300 metres (1,000 feet) above the water. Islands divide its lower course into several branches. The channels of the two mouths of the river are narrow and winding, and blocked by bars; ships of medium draught can enter only the western one. Junks ply also on the eastern branch and as far up almost as Mau-örr-schan. The valley of the lower course widens; at Wi-tschu, it is from 5 to 6 kilometres (3 to 4 miles) wide, the banks, too, gradually decreasing in height. But on the Manchurian side, opposite Wi-tschu, the hills approach the

river closer still, and command the eastern bank. The country on both banks of the lower Ya-lu is comparatively easy of access and passable; here all the more important roads leading to Central and Southern Manchuria cross the river, the means of transit being ferries or, in winter, the ice which lasts from December to February. Apart from these months the Ya-lu at other times forms a considerable obstacle and a useful means of communication, as its water-level scarcely alters.

The Tu-men is very similar in nature to the Ya-lu. Since the character of Northern Korea itself made extensive operations in that neighbourhood impossible, the Tu-men was of no account during the whole war.

The Manchurian Highlands.

Beyond the border rises a much-ramified mountainous country which, with the exception of the two lowland basins of the Liao-ho and Sungari rivers, occupies the whole of Manchuria. The Pek-tu-san forms the centre of this highland, too, which is called the Tschan-bo-schan system, after the name of one of its main ranges. From this centre stretches towards the west a watershed composed of several extensive ranges with various names dividing the basins of the Liao-ho and Sungari rivers, and finally ending in small undulating chains of low hills at, and west of, the railway portion Mukden—Tschang-tschun. From this watershed, in addition to several small mountain ranges, branch off the Lao-lin ridge accompanying the middle course of the Ya-lu, and another extensive mountain range (Scha-mu-schan, Fyn-siao-lin, Si-un-ö-schan), the extremities of which reach as far

as the southern end of the Liao-tung Peninsula and the Mukden—Yin-kou railway (Pin-lin, Ta-lin).

The Manchurian highlands, on the whole, do not rise beyond the height of secondary mountain ranges, the Pek-tu-san alone attains a height of about 2,440 metres (8,125 feet). The ranges thence pretty rapidly diminish in height towards the south and west. Almost all ranges show abrupt and irregular forms, have very steep slopes, and are separated by deep and often swampy valleys. In the neighbourhood of the railway only are the valleys broader, but even there steep slopes and great differences of level hamper communication.

The north-eastern portion of the Southern Manchurian highlands, between the Pek-tu-san, the Ya-lu, and west beyond the Chun-tsian, is, like the adjacent Korean territory, covered with dense virgin forest, traversed by many gorges and deep ravines, and sparsely populated. Operations of large bodies of troops are rendered very difficult there. Towards the west and south the growth of timber gradually diminishes. The extensive forests change into patches of wood and bushes; farther on these cease too, and the hills are completely bare. This applies especially to the hills of the Liao-tung Peninsula.

The western and southern portions of the mountains are more densely populated and better cultivated, more especially so the broad valleys of the eastern tributaries of the Liao-ho. In the virgin forest districts of the north-east there are but few bad paths. More numerous are the roads in the other portions of the mountains, but, as every-

where in Korea, these are mere natural tracks, very changeable, and sometimes loamy, sometimes covered with sand or stones. They frequently run close along the riverside, often crossing from one bank to the other. Roads of this kind are perfectly impassable in the rainy season of the summer, and this the more so as bridges and ferries are everywhere wanting; the conditions for traffic are best in winter, when the ice covering the rivers is used for traffic as well. The numerous passes over the mountains are so steep and, especially after heavy rains, torn up and strewn with stones to such an extent that their use becomes often impossible.

There is a sufficient number of roads leading from Korea to the Liao-ho basin and Liao-tung Peninsula. These roads mostly join the Korean roads on the lower Ya-lu, and, apart from the coast roads, lead through very close country with many difficult passes over the ranges which stretch from north to south. But for all that, the roads south-west of the line Fön-huan-tschön—Liao-yan, in particular the one leading from An-tung by Fön-huan-tschön to Liao-yan and Hai-tschön, are comparatively good and passable for artillery and military waggons in the dry season. North-east of the line indicated the roads are not only worse, but the country is also poorer in supplies, so much so that an advance, for instance, from the lower or middle course of the Ya-lu straight on Mukden would meet, even outside the forest district, with great difficulties.

Knowing these conditions, the Japanese in 1894-5 restricted their operations in the mountains

to the south-east corner of the Tschan-bo-schan highlands. But here they were able to get through everywhere with the aid of native means of transport.

The Liao-tung Peninsula.

The Liao-tung Peninsula is occupied by the Si-un-ö-schan mountain range and its branches, which partly reach straight to the sea, or, as on the eastern coast and in the Kwan-tung district, gradually merge into an undulating hill country. The Si-un-ö-schan rises in the north to a height of 1,000 metres (3,300 feet), and on the southern extremity the Lau-tië-schan-tau promontory is 461 metres (1,500 feet) above the level of the sea. In the north the hills are rounded and frequently grown with bushes; towards the south their surface becomes more barren and stony, and the slopes steep and rocky. The narrow, deep valleys alone, where a numerous population dwells, are fertile. The passes over the mountains are said to be passable for vehicular traffic everywhere, but are sure to present many difficulties to guns.

The Manchurian coasts.

It was obvious that the Japanese should desire to avoid the wearisome way through Korea by landing in Manchuria itself, or at least to render their advance over the Ya-lu river easier by such a landing. When considered from this point of view the Manchurian coast became of special interest in the course of the war.

The portion of the south-east coast of Liao-tung, from the mouth of the Ya-lu to Pi-tsze-wo, is very flat and has few indentations. Bars of sandbanks and the shallowness of the streams make a landing quite as difficult as on the Korean west coast.

The southern part of the peninsula, however, is better shaped, the coast there is steep and the channels are deeper. There are numerous islands, chiefly on the south-east coast. One of these islands, Hai-an-dao, has a good and extensive harbour. From Cape Fort Cheid to the mouth of the Liao-ho and west of it, the coast is again barred by a broad belt of mud-flats, which makes approach difficult, and for ships of large size more or less impossible.

Harbours and places for landing are Da-gu-schan, Pi-tsze-wo, Ta-liën-wan, Dalni, and Port Arthur on the Bay of Korea, Tauben (Pigeon) Bay, Kin-tschou Bay, Adams Bay, Kai-ping, and Yin-kou on the Gulf of Liao-tung.

Of these places, however, those only afford favourable conditions for landing which are situated on the Kwan-tung Peninsula. On all other points the shallow water obliges the transports to anchor some considerable distance away from the coast, in most cases without adequate protection, and to bring men and material ashore by wearisome and difficult passages on boats. Moreover, the whole coast north of Pi-tsze-wo and Port Adams is ice-bound for two to four months in the year. Port Arthur, one of the Kwan-tung harbours, was at the outbreak of war a Russian naval port; its geographical and defensive characteristics have been dealt with elsewhere.[1] The extensive unfortified Bay of Ta-liën-wan has good approaches, secure anchorages, and in Port Dalni, which the Russians

[1] Vols. xxxvii.-viii. of the Military Historical Monographs (Kriegsgeschichtliche Einzelschriften).

had constructed, there was a landing stage with every modern appliance; it was, however, impossible for the moment to use this place for landing owing to the close proximity of the Russian naval base. Yin-kou, on the west, affords the easiest access to the Liao-ho valley, and is the principal place for Manchuria's imports and exports, its use, however, being reduced by the ice prevailing from the beginning of December to the end of March, and by the bar, too, at the mouth of the Liao-ho, which, being not more than 2 to 6 metres (7 to 20 feet) deep, prevents large ships from entering the mouth. The opportunities for landing are thus not only few, but, by their nature, little better than those in Korea.

The Liao-ho plain.

The Liao-ho plain stretches on both sides of the lower Liao-ho and its tributaries, Hun-ho and Tai-tsy-ho, from the extremities of the Tschan-bo-schan highlands in the north and east to the heights of Liao-si, and to the Tali-au-ho in the west. About Tië-lin it is crossed by a range of hills running east to west, and dividing the basin into two unequal parts. Its total area is roughly 31,000 square kilometres (12,200 square miles). The whole basin is alluvial soil, and therefore an almost perfect plain. Numerous watercourses are the only obstacles. Communication in the rainy season of the summer is very restricted, not only by the rivers, but by the marshy condition of the whole country and its roads as well; in the dry months of the autumn, however, and above all in winter, when the watercourses are firmly frozen over, the country is everywhere passable.

With the exception of the marshy coast districts

and some sandy stretches on the river banks, the natural fertility of the soil and the industry of the population have turned the Southern Manchurian lowlands into a first-rate granary. Orchards and gardens follow one another. Numerous little groves of coniferous trees cover the tombs that are strewn all over the plain, and enliven the whole landscape. As the chief produce of the country, gaoljan,[1] grows in summer some metres high, view is very much restricted, which is the more felt by the absence of any natural eminences. The houses of the numerous towns and villages, as well as the many farms, gain, therefore, in importance as points affording a good view of the country. The houses are certainly small as a rule and insignificant, the villages and towns are confined, irregular, and dirty, but the high walls surrounding the towns, and the embankments and ditches, with which the villages in the river valley have secured themselves against inundations, turn them into strong tactical pivots well adapted for defence. The isolated farms, too, by the solid fences enclosing them, show a defensive capability which must not be despised.

The river-courses.

The district where the Liao-ho and its tributaries rise being almost without woods, any surface rain-water drains directly into them. Owing to the irregularity of downpours, the height of water in the rivers fluctuates very much. The influence of the rivers as obstacles and lines of communication is chiefly felt from July to September. Navigable to some considerable extent are only the Liao-ho

[1] A plant in its tall growth similar to the Indian corn.

and the lower courses of the Hun-ho and Tai-tsy-ho. The other rivers are at one time torrents, at others almost dried-up brooks. The separation of the various portions of the plain is increased by the larger streams running for some time parallel to the Liao-ho before joining it. The Liao-ho itself, when the water is highest, is in its lower course 1 kilometre (1,100 yards) and more wide, its depth being rarely more than 1½ metres (5 feet). As a precaution against floods, it is bordered by high dams. There are no permanent fords or bridges. The effect of the tides is felt as far up as the Hun-ho; at low tide extensive sand-banks show in the river-bed. The water of the river is clayey, and not fit for drinking. Although the Liao-ho is navigated only by junks and some small steamers, and though the ice lasts for four months, the traffic is a very lively one. Navigation on the Liao-ho, as an additional means for bringing up supplies to an army operating in Southern Manchuria, must not be underrated.

The roads in the Liao-ho plain.

The country roads are numerous, but mere natural tracks, the same as in the mountains; they are certainly level, but for that reason the more subject to the influence of the weather. They are in a passably good condition in the autumn only, particularly in October and November, when the soil is dry again after the heavy rains in summer, and in winter, when frost hardens the surface. From March the roads become soft by the thaw, the wheels cutting deep ruts in the surface. In a continuous rain during the summer months the road-surface changes into a tough mire,

rendering movement almost impossible. How quickly and thoroughly this change takes place is shown by the words of a German eye-witness in the war, who in one of his reports says:

"Our nocturnal drive gave us a little foretaste of the condition of the roads in the rainy season. After a twelve hours' rain the road, hitherto firm and without dust, had changed into a perfect morass; it took us three hours to cover the 4 kilometres (2½ miles) of road from Mukden to the camp; of our four waggons we had to leave two on the road altogether."

The Mandarin roads, Mukden—Liao-yan—Port Arthur and Mukden—Sin-min-tun—Schan-hai-kwan, are merely broader, but hardly any better than the ordinary roads. All movements of troops and transport in the Liao-ho plain are therefore carried out in summer under conditions completely different and incomparably more unfavourable than on a European theatre of war.

Means of transport.

The means of transport for traffic on these roads are of a very poor kind, as poor as the roads themselves, but adequate for the purpose—namely, heavy two-wheeled carts pulled by three to six draught animals, mostly horses (ponies), mules, donkeys, and sometimes oxen as well, the Chinese driving them with remarkable skill without reins. These carts can carry a load up to thirteen hundredweight; there are large stocks of these vehicles. Pack animals of all sorts are employed as well, especially in the mountains. Both armies used the carts to great advantage.

The supplies which the troops operating in the

Supplies in the country.

Liao-ho plain found on the spot without having to draw from their own supply columns were pretty plentiful. In addition to the large amount of cultivated gaoljan, the fruit of which is used for preparing a kind of flour, and as fodder, vegetables of all kinds are grown, Indian corn, and, to some limited extent, rice as well. Harvest is so abundant that, in spite of frequent damages by floods, there is a brisk export trade in peace time. This surplus was at least very welcome to the commissariat during the war. Of live stock there are only pigs in large numbers, the same as in Korea. Cattle are kept by the Chinese merely for work; that is the reason why cattle are neither good nor numerous. On the other hand, fowls are found in such great quantities that it was possible to use these and their eggs to a considerable extent for the supply of the army. Southern Manchuria produces little else that would supply an army in the field. The coal-pits of Yen-tai and Fu-schun, which are important for working the railway, had not been developed to their fullest capacity; the coal, moreover, was bad—at least, that of Yen-tai.

The climate of the main theatre of war.

The climate of the main theatre of war greatly varies according to local conditions, especially as regards the height above the sea-level and seasons; but, on the whole, a continental character prevails. Winter lasts from the middle of November to the end of March; it is severe, with not much snow, which, moreover, quickly disappears under the rays of the sun. Cold winds, frequently carrying a great amount of dust, are a particularly trouble-

some manifestation of a Manchurian winter. With spring comes a rapidly rising temperature and sporadic showers; summer, commencing in the middle of May, is very hot and rainy; autumn, to the end of October, is pleasant and dry. The cold in winter is only on the south-east coast of Liao-tung tempered by a warm current of the sea, thanks to which the ports are ice-free there. But even as far south as Yin-kou temperatures of 12° below zero Fahrenheit are not infrequent, while in the mountains and farther north the temperature sinks considerably lower still.

The rains in summer usually begin at the end of June; their duration varies much. The rainy season is over, as a rule, by the middle of August. It is, however, not a continuous period of rain at all, but rather one of irregular periods of days and even weeks without rain, and of such periods in which showers of a tropical violence constantly come down, soaking not only the soil, but also impregnating the whole air with moisture. Temperature being not appreciably lowered thereby, a damp sultriness arises, which makes itself very disagreeably felt. In this damp and sultry atmosphere innumerable, and very irksome, flies develop.

In 1901 and 1903 the rainy season is said to have commenced only on July 10, and to have made no appearance at all in 1902. In the summer of 1904 the weather was such that the first period of rain, lasting about a week, began as early as the middle of June, and the second, more violent, period after August 10, ending on the 19th.

Billets and hygiene.

The hardships of winter are felt by troops more when there is little opportunity for billeting them. Large bodies of troops are therefore in winter obliged to remain in those neighbourhoods where they have found ample billets or created shelter for themselves. Both parties, however—the Russians as well as the Japanese—were well prepared for these difficulties: the Russians by having learnt from the climatic conditions of their own country how best to protect themselves against the cold, and the Japanese, because they were hardened to the cold by their national costumes and mode of living, and had moreover properly prepared for a Manchurian winter, after they had been taught some unpleasant lessons in their war with China. The climate and bad conditions of water and housing react injuriously upon the health of the population. Thus, during the moist and warm summer, diarrhœa and other gastric and intestinal complaints, as well as berri-berri, are ripe, while the dry cold and the dust-storms in winter cause influenza and eye diseases. In addition there is malaria, which prevails in the marshy lowlands not far from the coast. Cholera, typhoid, dysentery, and plague occur as well. The defective hygienic conditions are the more dangerous to a foreigner, as he cannot count upon being inured to epidemics like a Chinese by constantly living in this kind of surroundings. Nevertheless, the sanitary conditions were not so bad after all that proper care could not prevent the spreading of diseases. The Japanese sanitary measures in particular proved thoroughly efficient against all danger to health which un-

doubtedly existed. The Russian state of health was generally good, too.

The population of the Liao-ho basin.

Neither Japan nor Russia had anything to fear from the people of the Liao-ho basin, which was rather densely populated, the number of inhabitants in the Mukden Province being estimated at 6,500,000. The Manchus, once so powerful in war, as well as the Chinese, who had largely emigrated, had long ago lost all national pride and martial spirit. They also accepted with Oriental resignation the horrors of war, whether caused by the Russians or the Japanese, and readily served each party as contractors or workmen, so long as they were paid. The only class of population which, though not expected to take an active part in open fight, might threaten the lines of communication, were the Chunchuses—bands of escaped convicts and professional robbers, whom neither the Chinese nor the Russian Governments had been able to suppress. As the Russian lines of communication were the more sensitive of the two, and as they had been fighting the Chunchuses for years, the Russians in the first instance had to reckon with this danger.

The adjacent Chinese districts.

Of the territories adjacent to the theatre of war we must mention first the western and south-western portions of Southern Manchuria, namely, the country of Liao-si, which forms the link between Mongolia and the province of Tschi-li. This district is occupied by the extremities of the Eastern Chinese Sung-lin-schan-mo mountains. They stretch along the sea and Mongolian frontier in a north-north-easterly direction, and about

Liao-yan merge into an undulating, well-cultivated and populous hill-country. The mountains of Liao-si, as far as the Great Wall at Schan-hai-kwan, are not high, but bare, rugged, and little accessible. The coast is flat and shallow; a port affording access to large ships does not exist.

That not only the remote southern portions of Liao-si, but also its northern part, remained untouched by the events of the war is above all probably due to the fact that neither the Japanese nor the Russians could afford to undertake extensive operations far away to the west of their lines of communication. Only the railway Sin-min-tun—Schan-hai-kwan with its branch line to Yin-kou came into play just because it was outside the field of operations and under neutral (Belgian) control; for it was this railway which gave the Russians access again to the sea after it was barred by Japan's naval superiority. The Russians derived considerable advantages under these circumstances, at least at the beginning of the war; later on it was similarly used by the Japanese for bringing up all kinds of supplies for their army.

Mongolia.

Mongolia, which touches the western borders of Liao-si and the Manchurian Liao-ho valley, is in its south-eastern portion a level and poor steppe with a thin population of nomads. This character of the country made it unsuitable for extensive operations. In fact, Mongolia was of importance to both parties only as a source of supply for live stock, in which the country abounded.

Girin, the central one of the three Manchurian

provinces, was also merely touched by the operations at the end of the war. The whole eastern part of that province is occupied by the little-known, little-accessible, and thinly populated northern extremities of the Tschan-bo-schan mountains, a wooded highland wanting in everything that would allow large bodies to operate, which, however, on account of its inhospitable nature, covered flank and rear of the Russian army, tied as that army was to the Chinese Eastern Railway. On the other hand, the smaller, western portion of that province, the Sungari basin, extending from the watershed in the neighbourhood north of Föng-hwa-sien as far as the Little Chingan, is hardly inferior to the Liao-ho valley as regards fertility, careful cultivation, and density of population; it is another granary of Manchuria, whose surplus in supplies of all kinds was of great advantage to the Russian army. A number of large towns like Tschang-tschun, Girin, and Charbin, which, situated at the junctions of the great railways and water-courses of the country, rapidly began to flourish, afford, moreover, many other kinds of resources.

The province of Girin.

In connection with this description we must cast a glance on the southern part of the Russian maritime province, the Ussuri-Land, as well, because in it we find the second Russian naval base Vladivostok, and because an invasion of this Russian territory by the Japanese, as being closer to them than any other, was not at all impossible. The Ussuri-Land is covered with wooded and little-accessible medium mountain ranges, the Sicho-

The Ussuri district.

taalins, which towards the east abruptly descend into the sea, while in the west they gently slope towards the Chanke lake and the Ussuri river. Its climate is exceedingly rough, in spite of its proximity to the sea and its southern latitude; summer is short and hot, winter very cold and long. For months the ice in winter and frequent mists in summer render approach to the coast, which is only well developed and of sufficient depth in its southern part, difficult.

The bulk of the population, about 230,000 souls, distributed over roughly 12,000 geographical (243,000 English) square miles, has settled in the southernmost part of the territory. In addition to the comparatively numerous Russians and few aborigines, it includes many Koreans and Chinese. In the south the virgin forest is cut down in many places, agriculture has made some progress, and mining has been started in this country which is so rich in coals and other minerals. The railway has caused Nikolsk-Ussuriski and Vladivostok to develop into considerable towns of about 15,000 to 30,000 inhabitants.

Vladivostok, by far the most important place, and until 1897 the chief naval base of the Russian Fleet on the Pacific, is situated at the southern extremity of the Murawiew-Amurski Peninsula, and has in the Bay of the Golden Horn, which cuts deeply into the country, one of the safest and most extensive harbours in the world. The Ruski Island, which bars the entrance to the harbour and facilitates its defence, forms an additional outer roadstead, equally well protected and with ample water.

Town and harbour were provided by the Russians with extensive fortifications and docks in the last twenty years of the past century. Vladivostok is, moreover, well connected with the country in rear by the construction of the eastern branch of the Eastern Chinese Railway and of the Ussuri Railway leading to the great waterway of the Amur. The block to navigation by ice, however, which on the average lasts for 110 days, the Russian Government was unable to get rid of. A channel kept open with much trouble by ice-breakers is always but a poor expedient. Thus, in spite of all its other advantages, Vladivostok had to rank second to Port Arthur, and was therefore destined to play only a subordinate rôle in the fight with Japan.

The remainder of Russia's vast East Asiatic dominions, including the Manchurian North-west Province, was from the outset beyond the probable theatre of war. Nor did their scanty supplies come into account at all. There is, first, the Manchurian North-west Province, which is a poor, rough, deserted highland traversed by the mountain ranges of the Great and Little Chingan, covered with forests, swamps, and steppes, and cultivated by Chinese settlers in but few places. The rest of Asiatic Russia.

Then there is the Transbaikal district bordering Manchuria on the north-west, which is of the same character, a cold mountainous desert; but its value lies in its still untouched mineral wealth. West of Lake Baikal, too, with its 34,000 square kilometres (8,500 square miles) one of the largest fresh-water lakes in the world, Eastern Siberia retains even in

its southern portions the character of a deserted and empty waste arising from the nature and climate of the country. It is only in Western Siberia—that is to say, in the extensive lowlands stretching from the Ural to the Altai—that a more fertile soil has attracted a more numerous population and caused a comparatively well-developed cultivation to take place. Here we meet for the first time with the supplies the Russian War Administration obtained beyond the theatre of war or its immediate neighbourhood; here begin, for the present at least, those parts of Russia which are politically and economically of real value to her. The great distance of the theatre of war from this part of Russia certainly rendered the full employment of Russian power in the Far East difficult; but at the same time that distance prevented any serious threat to valuable portions of the realm.

Origin of the Siberian Railway.

Connection of the Russian army with these far-distant sources of supply was kept up by the railway Moscow—Port Arthur, 8,500 kilometres (5,300 miles) in length. Not only concentration and maintenance of the army, but even the raising and organisation of most of its units depended on that line. A glance at the construction of the Siberian Railway and its development until the outbreak of the Russo-Japanese War will enable us to appreciate best the great difficulties in that respect.

Among the comprehensive efforts made by the Russian Government during the last thirty years for raising the productive power of the realm, those were not the smallest by which it was hoped to turn the vast Siberian dominions from a useless

annex to the empire into a portion capable of great development. That to attain this object solid roads above all were required for exploiting its mineral wealth and developing agriculture and industry was early recognised by Count Murawiew, the first Governor of the Amur District, who for this reason had some fifty years ago proposed to construct a railway from the Ural to the Amur. Since then the idea was never dropped, as is proved by a series of projects dealing with it. It was in 1887, when the preliminary steps for the construction of the Ussuri line were in progress, that serious measures were taken in hand for constructing railways in Siberia, and on February 27, 1891, orders were issued at last to commence the construction of the Great Siberian Railway. After the orders had been promulgated the works were completed with remarkable rapidity in less than ten years.

It took barely two years to survey and determine its direction. The line joined the European railway net at Tscheljabinsk, thence it passed through the best-populated parts of Western Siberia by Kurgan, Omsk, past Tomsk in the south, then by Krasnojarsk, Irkutsk to Lake Baikal, turning it on the south, and then to the Schilka at Stretensk. From the last-mentioned place the Schilka—Amur steamers were to act for the present as continuation of the line. This portion of the railway and part of the Ussuri line were finished in 1899 at a cost of more than £350,000,000. The portion turning Lake Baikal alone remained unfinished, exceptional engineering difficulties

being met there. Connection was established here by steam ferries and ice-breakers.

While these works were still in progress Russia's railway engineers had to face some new tasks by the acquisition of the Kwan-tung district and the stipulations with China in connection therewith; namely, Port Arthur had to be connected by rail with the Russian hinterland, and Vladivostok was to have a more efficient and 500 kilometres (330 miles) shorter connection with the Siberian Railway system. Thus, from Kaidalowo station, on the Transbaikal Railway, a new line was built to Charbin on the Sungari, and thence an eastern branch by Pogranitschnaja to Ketritschewo on the Ussuri line, and another by Mukden—Liao-yan to Dalni and Port Arthur. This Chinese Eastern Railway was built by the Russo-Chinese Bank, but, as a matter of fact, this line was also the work of the Russian Government. In spite of interruption and partial destruction of the works during the Boxer troubles, this railway was finished within the period from 1898 to spring 1903. Its total length is about 2,500 kilometres (1,550 miles).

Carrying-capacity of the Siberian Railway.

The establishment of a railway connection of such enormous extent through a country that was hitherto shut off almost from any international traffic, the opening up of a trade route by which the time for travelling from Europe to Asia was reduced by half, and the fare to two-fifths its former price, was a work of civilisation that must ever rank among the foremost. The fact that this gigantic work showed some deficiencies, nay, was even bound to show deficiencies under the

conditions as they were and by the way it was originated, does not detract from this verdict. It is, however, necessary to direct attention to these deficiencies so as to put into proper relief the services rendered by the railway during the war and the difficulties with which the Russian Headquarters had to reckon in rear of the army.

Although Russia kept free from any cheeseparing financial policy when constructing her Asiatic railway, yet in order not to increase the cost, which bore no interest, immoderately, she had to impose some limits, which injuriously affected the capacity of the railway. Such limits were: the construction of the railway as a single line, reductions in the breadth of embankments, permission of curves with a radius down to 320 metres (355 yards), use of a lighter kind of sleepers and rails, simplification of all secondary constructions, and the small number of stations. At first the larger rivers alone were bridged with iron structures, wooden bridges being considered sufficient for the smaller watercourses. In the mountainous Central Siberian portions they had, in order to avoid circuitous routes, to put up with many a steep gradient, necessitating a division of trains, and with many other dangerous changes of gradients. The supply of water was impaired by the great percentage of salt in the streams of the Western Siberian section, and in the Transbaikal section by the scarcity of water, and by the cold, which rendered the construction of water-conducts very difficult in the eternally frozen soil. All these defects, and other faults too which may have

crept in in the hurry of construction, are shown by the limited amount of traffic on the line, which at first was only three trains per day in both directions, and by the maximum length of trains authorised, which counted sixty axles only. As a matter of fact soon after the West Siberian section was opened, the line did not even meet the rapidly increasing demands of the ordinary traffic in peace time. Allowing but one train per day in war to supply the wants of the railway line itself and of the East Siberian inhabitants, who are dependent on that line, there would be left for military purposes only two trains in either direction. With the object of improving this unsatisfactory performance the sum of 91,316,791 roubles was set aside in 1898, immediately after completion of the main portions, for increasing the number of stations and rolling-stock, for reconstruction of sections dangerous to traffic, and for a better class of rails and sleepers. These works were to be carried out gradually and were to raise the capacity of the line to run thirteen pairs of trains daily in 1904.

Lake Baikal.

The weakest point in the Siberian Railway, however, was the want of an efficient link across Lake Baikal. In reference to this the then Russian Minister of Finance, Witte, had spoken as follows in 1903:

"For three months in the year steam traffic across the lake is impossible in spite of the construction of two transport steamers as ice-breakers, and is replaced by transport sledges. When the road for sledges is not yet, or is no longer, firm enough, traffic across the lake is altogether stopped

(in winter 1900–1 for forty-seven days). But navigation is also much disturbed by gales and fogs, and this again reacts unfavourably on the regularity of railway traffic east and west. The work performed by the two steamboats themselves is, after all, very poor. Each of the two steamers makes on the average only one and a half trips in twenty-four hours between Baikal, where the Angara leaves the lake, and Myssowaja, where the Transbaikal Railway starts (80 kilometres, or 50 miles). Each boat carries twenty-seven trucks, and thus brings forty of them over in twenty-four hours—that is to say, eighty-eight goods vans less than could be dispatched even last year on the most difficult stretches of the Siberian Railway.

"Transit of passengers is conducted by passenger-boats; these are certainly sufficient for average wants, but as little able to deal with an increased traffic as the ice-breakers. The difficulties are obvious that must arise, for instance, when transporting recruits or settlers for the Amur and Ussuri districts, not to mention warlike complications."

The railway turning Lake Baikal.

But the railway around Lake Baikal, which was to remedy these defects, passes for a distance of 260 kilometres (162 miles) over high and desolate mountains, along the steep rocky shores rising abruptly from the deep lake, and was as difficult to construct as it was costly. It was not expected to be opened till spring 1905. The only improvement that could be attained until the end of 1903 was the opening of the portion Myssowaja—Tanchoi (on the eastern shore), by which the pas-

sage across the lake was reduced to 40 kilometres (25 miles).

The possibility of future warlike complications, regard for heavier traffic that could be expected in denser populated Manchuria, and the experiences derived from the construction of the Siberian Railway, may have contributed to the Eastern Chinese Railways being more solidly built, with durable bridges, heavier rails, wider embankments, easier gradients, and slighter curves. The steep transit over the Great Chingan forming a weak spot in the line, was from the outset planned to be replaced by a tunnel, the construction of which, as it was 4 kilometres ($2\frac{1}{2}$ miles) long, would take of course some considerable time. Efforts, too, were made to increase the rolling-stock and number of engines, in both of which the line was at first rather deficient. Thus the easternmost lines, soon after they had been opened, surpassed the more western sections, especially the Transbaikal Railway, in length of trains permissible—forty-four waggons against thirty-five —and probably in the number of trains as well.

In spite of the efforts made to improve the line, the connection of the Russian forces in East Asia with their home country was, and remained, an unreliable and uncertain factor in the calculations of army Headquarters. No measures, were they ever so energetic, could be designed to remove this uncertainty, and it was only gradually as the Manchurian army itself increased and concentrated, and as the railway works advanced, that greater freedom of action was assured to the commander-in-chief; but even then the army as a whole, with

all its wants and supplies, remained dependent on the Siberian and Eastern Chinese Railways.

The security of the Japanese lines of communication, on the other hand, chiefly depended on the command of the sea. Since the Japanese fleet soon succeeded in gaining and permanently maintaining it, the insular position of their home country was, owing to its proximity to the theatre of war, rather an advantage to the Japanese.

III

THE OPPOSING FORCES AT THE OUTBREAK OF THE WAR

A. *RUSSIA*

Peace organisation of the troops in Eastern Asia.

According to the peace organisation of the Russian land forces in Eastern Asia, the following were the troops in the provinces of the Far East at the outbreak of war:

1. *Field troops:*

Appendix I.

84 battalions, 1 machine-gun company, 35 squadrons or sotnias, 25 batteries, 8 companies technical troops—roughly 86,500 men.

2. *Fortress troops:*

1 Fortress Infantry battalion, 4¼ Garrison Artillery battalions, 1 Garrison Artillery detachment, 5 companies technical troops, 1 Fortress Telegraph detachment, 1 Fortress Balloon detachment—roughly 7,800 men.

3. *Railway troops:*

20 companies—roughly 5,300 men.

4. *Troops guarding railway:*

Frontier guard of the Trans-Amur district: 55 companies, 55 squadrons, 16 batteries—roughly 30,000 men.

On their way from Europe were:

3rd East Siberian Sapper battalion, 9th East Siberian Rifle Brigade, and 4 batteries, together about 9,100.

The Russian field army was stationed with its main forces in the Southern Ussuri district about Vladivostok and in the Kwan-tung district, some portions being in the neighbourhood of Charbin. Troops had begun to move from Northern Manchuria and the Ussuri district to Southern Manchuria. Sketch 2

The organisation of the field troops in two Army Corps was a temporary one. The 2nd Siberian Army Corps had been much weakened lately by having to detach portions to the Kwan-tung territory. Unlike the Russian European army corps, these were not organised in divisions. A large portion of the Russian field troops did not form part of an army corps, but was placed directly under the district or territorial chief.

The Russian field army was strikingly weak in Artillery, especially in Mountain Artillery. Being 84 battalions strong, it had only 25 batteries (2 H.A. batteries of 6 guns each, 2 Mountain and 21 F.A. batteries of 8 guns each), whereas 14 to 16 batteries are apportioned to a Russian European army corps of 32 battalions. The organisation of the Field Artillery in East Asia was rather

irregular. The field army had no heavy Artillery at all at the outbreak of war.

Arms. The Russian Infantry was armed with the 7·6 millimetre (·304 inch) rifle M. 91. The machine-gun companies in East Asia had their machine-guns partly on limbers, and partly on pack animals. The arms of the Cossacks were the 7·6 millimetre (·304 inch) Cossack rifle and the sabre. Only the Don Cossacks and the Siberian Cossacks, arriving on the theatre of war at a later period, carried lances, and then only in the front rank. The Dragoons were armed with their special dragoon-rifle, with bayonet and sabre.

The Russian Field Artillery was in process of re-arming with quick-firing guns when the war broke out. The Artillery in the Government of the Far East had been armed with this 7·62 centimetre (3·048 inch), Q.F. Mark 1900 Putilow gun, in January 1904. The gun had no protective shields. The imperfect recoil-mechanism, especially the little durability of the india-rubber buffers, as well as other defective material that can be traced to bad manufacture, are said to have caused considerable waste during the campaign. In addition, there were complaints about the heavy weight of this gun, and about the instability of the gun-carriage when firing. The mountain batteries were armed with the old guns, and were only in August 1904 provided with Q.F. guns. When war broke out this Q.F. mountain gun was just then under trial. The Artillery of the 4th Siberian Army Corps was at first equipped with the old 8·69 centimetre (3·476 inch) screw-gun.

As the Putilow Q.F. guns were without common shell, a number of the old pattern screw-guns were brought up to the theatre of war during the latter half of the campaign. It was only towards the end of the war that Russia sent to East Asia a Putilow Q.F. battery provided with protecting shields (improved pattern M. 1902).[1] The obsolete 15·24 centimetre (6·096 inch) field mortar was no good. Later on, therefore, 12 centimetre (4·8 inch) Krupp Q.F. field howitzers were procured.[1]

Training.

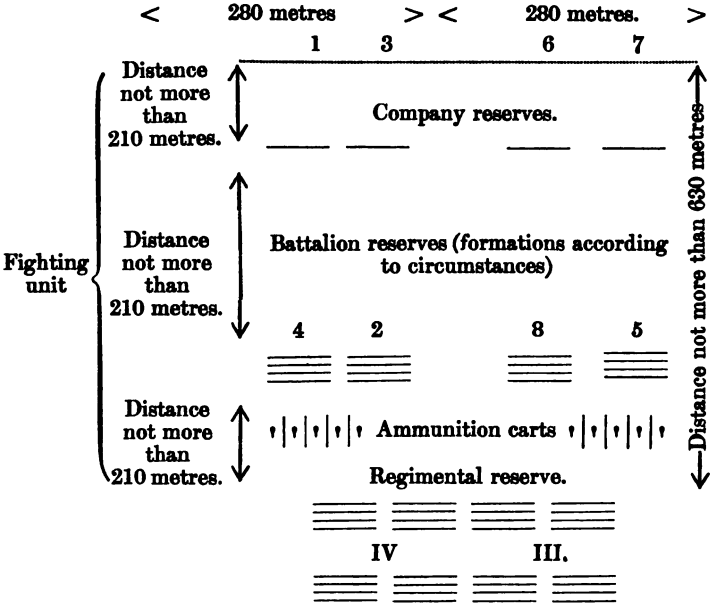
The "Infantry Drill of 1900," as well as Dragomirow's regulations for the co-operation of detachments of all arms of 1901, governed the training of the Infantry. It is well known in what high esteem Dragomirow's views on the training of troops were still held in the Russian army at the beginning of the campaign, in opposition to the voices of many senior general staff-officers. During a long period of peace the lessons of the Russo-Turkish War had been forgotten. Instead of insisting upon a thorough individual training of the men for fire action, strict education in fire discipline, and proper warlike practice in directing fire action and in handling troops, the Russian regulations expected success from obsolete shock tactics without sufficient use of skirmishers and without enough preparation by fire. Decision in battle was not sought in fire action, but in the bayonet charge of dense masses. Tactics which look upon the individual soldier as a unit, and demand from him decision and action on his own initiative, were not recognised in the Russian regulations.

[1] Did not come into action.

Faith in the irresistible force of the Russian bayonet charge was so firmly established that only gradually could they accustom themselves to other forms. In order to retain a firm hold on the masses, almost nothing but volleys of all the kinds of fire prescribed in the regulations, which were individual slow and rapid fire, squad-fire, and volley-fire, came to be used by degrees.

The idea of sound fire tactics and the conception of the diversity of forms in a modern action were foreign to the Russian army. This is proved by the normal procedure in their attack, which is divided into two distinct stages. Dragomirow's regulations organise the Infantry attack into the advance to the decisive fire position, which is presumed to be 300 to 400 metres (330—440 yards) from the enemy, and in which the assault is to be prepared, and into the actual assault. In the chapter on organisation in depth, the regulations also lay down precise rules, by distinguishing certain units, as well as the general reserve, as bodies, which are to bring about the decision by the bayonet charge, and by laying down regular distances for organisation in depth. The fighting unit is again organised into sub-divisions, each sub-division into the fighting portion and local reserve. The Russian mode of attack is characterised by narrow fronts—battalion 280 metres (310 yards), regiment 700 metres (780 yards), brigade 1,067 metres (1,180 yards), division 2,130 metres (2,360 yards), army corps 3,200 metres (3,550 yards) —short distances and great depth. The organisation

of attack of an Infantry regiment is apparent from the following scheme:



The Russian regulations assumed the attack to proceed somewhat on the following lines:

Deployment for action was to begin at about 2 to 2·5 kilometres (2,200 to 2,750 yards) from the enemy, and at 4 kilometres (4,400 yards) if the enemy opened with artillery. Detachments of scouts were to complete reconnaissance. This deprived the troops from the outset of a great number of their best men for fire action. The main body, protected by the advanced guard, was to continue its march, and, by order of the General Commanding, to assume mass or assembly formation. The leading companies were to advance

without firing to within 1,400 metres (1,550 yards) of the enemy ; they were then to form a skirmishing line and, at a walk, to try and come within 1,000 or 700 metres (1,100 or 750 yards). Here the preparation for the assault with the bayonet was to begin by opening fire. From this position the firing line, while " stopping in positions favourable for fire-action," was to advance at first at a walk, and then in rushes. The company reserves followed in suitable formations at 210 metres (235 yards) in open order, either in company column, in sections or sub-sections, in fours or in line. The battalion and regimental reserves had to keep a distance of not more than 210 metres (235 yards) from each other, and the battalion reserves had to keep the same distance from the company reserves. Reserves were to be husbanded, and commanders were to retain a reserve to the very last. The Russian regulations took it for granted that the battalion reserves would be used up at a distance of 200 to 300 metres (220 to 330 yards) from the enemy. Fire superiority was not considered a primary condition before delivering any assault. The last rush was to be made at the double when within 30 metres (35 yards) from the position. No stress was laid upon the necessity of using the last man at the decisive moment. Mixing units was not considered a disadvantage. The conviction that it was necessary to direct the attack simultaneously against flank and front was also absent. It became the custom to keep more than half of the whole force well in rear as a reserve, so as to be able to meet every possible contingency. This

made the reserve to be too late at the crisis in most cases, if it was resolved to use it at all.

The defence was to end in a general counter-attack. It was recommended to hold back strong reserves for some considerable time. As a rule, these reserves, if they were used at all at the proper moment, were almost always engaged in making a frontal counter-attack in close order and without firing a shot.

The principles of Russian regulations for the employment of Cavalry in action need not be discussed here in detail, since, apart from a few European regiments, no trained Cavalry, or what we should consider as such, was employed on the theatre of war. This explains the failure in the most important branch of Cavalry training: the strategic and tactical reconnaissance. The Cossacks, with few exceptions, were unable either to read or to write.

Russian Headquarters had decided to form Artillery reserves. The disadvantages of retaining such reserves, whenever it was done in excess, became apparent in almost every action in Eastern Asia. Artillery was attached to the advanced guard for reconnoitring purposes. The Artillery of the main body had to come into action in a body. Before moving into a fire position, it had always to take up first a position of readiness. Employment of Artillery in masses, and their combined fire-action, were not dealt with in the Russian regulations. We therefore see the Russian batteries in Eastern Asia mostly dispersed in action, and, as they were unprovided with protective shields,

fighting in covered positions at distant ranges with insufficient scope for observation. But the Artillery being in the process of re-arming, its practice, too, was at first not up to the required standard. It was not sufficiently trained in fire tactics and in co-operating with Infantry. Co-operation between the various arms was altogether poorly developed.

Along with the unwarlike training of both individual soldier and units, who had been brought up under a complete misapprehension of modern fire-action, the inability of the lower and higher grades to act on their own initiative showed to particular disadvantage. But the training of the staff officers of superior commanders, too, was not up to modern requirements. Generals and staff officers, however, who have not become intimately conversant already in peace with the conditions governing the movements of modern masses, must be at a loss when confronted by them in war. Improvising anything at such a moment is then as good as impossible. Moreover, as we know from history, the offensive was never a strong point with the Russian army. Slow as the Russian troops were, strategically as well as tactically, fighting constantly in fortified positions with their pernicious influence made them, when confronted with the energetic Japanese offensive, gradually think more and more of the moment when it was time to begin an always well-prepared retreat, and this in spite of the [illegible] other excellent [illegible] and human [illegible] befell the [illegible] of

victory, self-confidence, and, by degrees, also discipline, were bound to be shaken. It is the deterioration of just these moral forces, which we call the spirit of the troops, combined with the unpopularity of the war, that we must not lose sight of when judging the measures adopted by Headquarters, especially towards the end of the campaign, for many of the Commander-in-Chief's resolutions must have been influenced thereby.

Troops in Eastern Asia at the outbreak of the war.

After the arrival of the 3rd East Siberian Sapper battalion, and 9th East Siberian Rifle Brigade with its Artillery, and not counting the 4 depôt battalions of the 1st Siberian Reserve Infantry Brigade, and the fortress, railway, and railway guard troops, the following field troops were in Eastern Asia ready to take the field in the second half of February 1904: 92 battalions, 1 machine-gun company, 35 squadrons and sotnias, 29 batteries, and 13 companies technical troops, altogether about 95,600 men, 228 guns, and 8 machine-guns.

Appendix 1.

After arrangements had been made, immediately after the outbreak of war, for the dispatch to the lower Ya-lu of the 3rd East Siberian Rifle Brigade and Major-General Mischtschenko's Transbaikal Cossack Brigade, which latter was composed of the Cossack regiments in the Kwan-tung district and Southern Manchuria, the Russian field army was in the middle of February distributed somewhat as follows:

1. *In the Southern Ussuri District at Vladivostok:*

1st Siberian Army Corps less 5th Rifle Regiment, 8th East Siberian Rifle Brigade, 2nd Brigade of

the 31st Infantry Division with Artillery attached, 2nd Brigade of the 35th Infantry Division and its artillery—about 45,000 men.

2. *About Charbin:*

5th East Siberian Rifle Brigade—about 8,000 men.

3. *In the space Mukden—Wi-tschu—Yin-kou:*

(a) *About Yin-kou:* 9th East Siberian Rifle Brigade and Artillery—roughly 9,100 men.

(b) *Pushed forward to the Ya-lu:* 3rd East Siberian Rifle Brigade, Transbaikal Cossack Brigade and Artillery — about 11,000 men, altogether roughly 20,100 men.

4. *In the Kwan-tung District:*

4th East Siberian Rifle Brigade, 7th East Siberian Rifle Brigade, 5th East Siberian Rifle Regiment as well as Artillery—about 22,500 men.

All troops in the dominions of the Far East had their establishments approximately on a war footing, but they were unprovided with ammunition and supply columns, and the two European Infantry brigades, that is to say, the 2nd Brigades of the 31st and 35th Infantry Divisions, which had been transferred to Eastern Asia in summer 1903 to test, it is alleged, the carrying capacity of the railway, were on a peace establishment. The East Siberian Rifle regiments and the regiments of the two European brigades had established detachments of trained Mounted Scouts, each 144 strong, before the war broke out.

The Frontier Guards of the Trans-Amur district were organised in four brigades, and distributed in posts along the railway for its protection. Reserve detachments, composed of all arms, were always held in readiness at brigade headquarters at Buchatu, Charbin, Chantachesa, and Liao-yan to act as flying columns. Very few only of the Frontier Guards had occasion to co-operate temporarily with the field army, as did a regiment of horse and a mountain battery at Wa-fan-gou on June 14 and 15, 1904.

The powers of command within the higher units, and the distribution of the troops composing these higher East Asiatic units, over the various districts were of a very complicated nature at the outbreak of the war.

By an Imperial Ukas of August 12, 1903, the Amur military district, that portion of Manchuria which was occupied by the Russians, and the Kwan-tung territory, were formed into a separate Government of the Far East. At the same time, the Kwan-tung territory, together with the above-mentioned portions of Manchuria, were formed into a military district of equal rank to that of the Amur, and were placed, both militarily and politically, under the authority of the "Governor of the Far East." To this newly created important post of Governor the Tsar had appointed Admiral Alexejew, who was Commander-in-Chief of the naval forces in the Pacific, and also commanded the troops in the Kwan-tung territory, assigning to himself Port Arthur as his official residence.

Admiral Alexejew was sixty-one years old when

Admiral Alexejew.

the war broke out. He entered the Naval College in 1860, and became a Lieutenant in 1867. For five years he was in command of the cruiser *Kornilow*, spending two years of that time in the Far East. Beyond being a naval attaché for four years in Paris, he held no other exceptional appointment. Promoted Rear-Admiral in 1892, he was, from 1892 to 1895, employed as an assistant to the Chief of the Naval Staff. In 1894 he was promoted Vice-Admiral. With the exception of a short break in 1897-8, Alexejew occupied commanding positions in Eastern Asia since 1895, first as Commander of the Pacific Squadron, and then, from 1899 to 1903, as Governor of the Kwan-tung territory and Commander-in-Chief of the troops stationed there, as well as of the naval forces in the Pacific.

On August 12, 1903, he was charged with the supreme command of all the forces and military establishments in the Government of the Far East, with supreme naval power, and with the civil administration, as well as with the conduct of diplomatic negotiations. In addition to his naval staff he had a special staff advising him on all military matters.

Lieutenant-General Linewitsch, who had been commanding the 1st Siberian Army Corps, was appointed Commander-in-Chief of all the troops in the Amur military district.

Whilst a portion of the troops in the Amur district and in Manchuria had been organised into higher units, which were to be administered by the commanders of the 1st and 2nd Siberian Army

Corps, such organisation did not exist for the Kwan-tung troops. The General Commanding in the Kwan-tung district, whose place was vacant [1] at the outbreak of war, and who in peace holds the rank of a general commanding an army corps, had never a free hand over his troops as a unit, as some of his troops were garrisoned outside the Kwan-tung district, and within the jurisdiction of the 2nd Siberian Army Corps. On the other hand, he had a limited right to dispose over the troops garrisoning in the Kwan-tung district, but which actually belonged to the 1st or 2nd Siberian Army Corps.

General Linewitsch.

Admiral Alexejew retained supreme command over all East Asiatic land forces even after the outbreak of war. Temporarily he handed over the command of the Manchurian Army which was to be formed in Southern Manchuria to Lieutenant-General Linewitsch, Commander-in-Chief of the troops in the Amur military district. Lieutenant-General Linewitsch was sixty-six years old at the beginning of the campaign. The whole of his service was spent with his regiment and in active command of troops, and he had taken part in the campaigns of 1859, 1860 to 1864, and 1877-8. In 1860 promoted Lieutenant, he commanded from 1868 to 1871 a company. In 1871 he became a Major; he then commanded for two and a quarter years the 2nd Caucasian Rifle Battalion;

[1] Lieutenant-General Stoessel, who, in place of Alexejew, had been appointed Commandant of Port Arthur in August 1903, was, at the outbreak of war, made first General Commanding the newly created 3rd Siberian Army Corps, and then, only in summer 1904, appointed General-in-Chief of the Kwan-tung Peninsula Defences.

and from 1878 he was for six years Colonel, an in command of the 84th Infantry Regiment. Fro 1885 to 1895 he commanded the 2nd Trans-Caspia Rifle Brigade; in 1891 he was made Majo General, and from 1895 to 1900 he commande the troops in the South Ussuri district. In 189 promoted Lieutenant-General, he was appointe Commander of the 1st Siberian Army Corps i July 1900. He took part in the Peking Exped tion, and on October 15, 1903, was appointe Commander-in-Chief of the troops in the Pr Amur military district. When Kuropatkin too over the supreme command, Alexejew appointe him Chief of Defences and Governor-General the Amur military district on April 27, 190 On September 3 he was promoted General Infantry; on November 9, 1904, he was appointe Commander-in-Chief of the 1st Manchurian Army and on March 16, 1905, Commander-in-Chief all the forces operating against Japan.

General Kuropatkin.

As early as February 20, 1904, the then Ministe of War, General of Infantry Kuropatkin, wa appointed Commander-in-Chief of the Manchuria Army of Operations. After his arrival in Liao-ya on March 27, 1904, Lieutenant-General Linewitsc resumed his command of the Amur military di trict. General Kuropatkin was born on March 1 1848, the son of a provincial official. Educate in the Cadet Corps, and then, from 1864, i the Paul War School, he was in 1866 posted Lieutenant to the 1st Turkestan Rifle Battalio In Kaufmann's campaigns in Central Asia h commanded a company when not yet twenty yea

old. Promoted Staff-Captain in 1870, he entered the Nicolas Staff College. In 1874 he accompanied for eleven months the French expedition, under Laverdeau, from Algiers into the Sahara. Transferred to the General Staff in 1876, he took part in Skobelew's campaigns in Central Asia. During the Russo-Turkish War of 1877-8 he was Skobelew's Chief of the Staff. In both campaigns Kuropatkin was wounded. After temporary employment as an instructor at the Staff College, he was in 1879 appointed Commander of the Turkestan Rifle Brigade, and as such distinguished himself in the Turkoman campaign of 1880-1. In 1882 promoted Major-General, when he was but thirty-four years of age, he did duty with the Great General Staff from 1883 to 1890 as a General for Special Missions; and in 1890, promoted Lieutenant-General, he rendered for eight years conspicuous service as Commander-in-Chief of the Trans-Caspian District. As Minister of War (since 1898) he had followed the example of his predecessor, General Wannowski, and furthered the development of the army. He took special care to strengthen Russia's military power in Eastern Asia, without, however, being able to enforce his plans completely. His promotion to General of Infantry dates from December 19, 1900.

The Imperial telegram informing Alexejew of Kuropatkin's appointment was as follows:

"In view of the importance of the coming struggle, which is finally to secure Russia's supremacy on the shores of the Pacific, and fore-

seeing that it will become necessary for you, as my Viceroy, to transfer your residence to a more central point—say Charbin, or any other place of your choice—I think it useful to appoint for your assistance Aide-de-Camp General Kuropatkin as Commander of the land forces with the rights of a Commander-in-Chief, and Vice-Admiral Makarow as Commander of the naval forces with the rights of an Admiral of the Fleet. I am convinced that the appointment of these independent and responsible chief commanders will ensure for you, as my Viceroy, the fulfilment of the difficult and eminent task that has been allotted to you."

Up to October 25, 1904, when Admiral Alexejew was recalled, the arrangement thus made for the conduct of affairs worked highly detrimental to the active operations of the Manchurian Army.

ncen- ation origi- lly anned.

As it transpired afterwards, by the Russian plan of concentration, as originally arranged in case of war with Japan, all available East Asiatic field forces, reinforced by the Cossack formations of the 2nd and 3rd Reserve, were to be assembled about Vladivostok, to the south of Mukden, and in the Kwan-tung territory, and the reinforcements which were expected to arrive in due course were to form an Army in second line about Charbin and west of it. On the whole, it seems to have been intended to deploy against Japan a field force of roughly 300,000 men, of whom about 185,000 were to be in second line.

It was apparently presumed that Japan would be able to oppose Russia with superior forces at the beginning of the war. So long as there were

still any doubts about the landing-places of the Japanese Army, the Russian General Staff thought it evidently premature to fix the place of concentration of the main forces beyond the railway junction of Charbin, as the troops could thence be employed in the direction of Vladivostok as well as in that of Liao-tung. Although the ice at Vladivostok, and the fortifications of that place, as well as those of Possjet Bay, made a landing of the Japanese in the Southern Ussuri district seem unlikely, though not impossible, it was intended, in case of war, to concentrate there from the outset in first line a considerably stronger portion of the army than in Southern Manchuria. This measure was perhaps also dictated by the way in which the troops had to be quartered in peace-time, which prevented Russia from massing too many troops in Southern Manchuria during peace, so as not to rouse suspicion in Japan.

Difficulties of transport on the Siberian Railway.

The carefully arranged mobilisation and the intended concentration did not come off. When war broke out suddenly and inopportunely, Russia thought that she must depart from her original plan of mobilisation.

Mobilisation, transport, and concentration of the Russian troops for Eastern Asia were dependent on the efficient working of but a single line of railway, which at the outbreak of war was still very inefficient. The serious transport difficulties which Russia had to face as best she could at the beginning of the campaign, have already been described in detail.[1]

[1] Pages 50-55.

Sketch 1. The Siberian Railway was not yet a continuous line of rails. Of the railway round Lake Baikal 180 kilometres (112½ miles) were not finished. It is true that the number of passages by steamer had been increased to six or eight—that is to say, three to four trips in either direction—by the opening of the line Tanchoi—Myssowaja, but the conditions of the weather had stopped the ice-breakers at work as early as January 27. Traffic across the lake on sledges had opened on January 25.

In order to increase the carrying capacity of the Siberian Railway, which was still very poor at first, but above all to make it possible to move large bodies of troops within the Government of the Far East itself, it was of great importance to provide the railways east of Lake Baikal with sufficient rolling-stock. With the object, therefore, of transplanting railway waggons and engines, a track of rails 40 kilometres (25 miles) long was laid over the ice from Baikal Station to Tanchoi Station between February 10 and 29, 1904. After infinite pains they succeeded in overcoming the many physical obstacles in the way of this bold enterprise. In order to make as large as possible a surface of ice bear the weight, the rails were laid on exceptionally long and strong sleepers. Special measures had to be adopted at such places where frequent rents and blocks in the ice occurred. Rents across the track were got over by short bridges, and rents along the track by altering its course. To watch the track and keep it in repair, columns of workmen had to be kept

constantly ready. Telephonic communication rendered rapid mutual intercourse between these parties possible.

The railway carriages were each drawn across the lake by two horses, and they followed each other at a distance of about 100 metres (110 yards). The first carriages arrived at Tanchoi on March 2. These were followed by about 220 waggons daily. Roughly, 1,300 waggons were got over the ice until the middle of March, and upon them was brought across a great quantity of war material as well as railway plant for the wants of the lines east of Lake Baikal. The transfer of engines could not begin before March 19, as a rent a little over 21 kilometres (13 miles) long necessitated a shifting of the rails laterally, which took four days to accomplish.

The attempt of bringing the heavy engines across the lake by their own steam-power having failed, they were taken to pieces in such a way that no part weighed more than 30 tons; they were thus taken across in portions, and re-fitted on the opposite shore. The boilers were placed on two low trucks, the engine frames, running on their own wheels, and coupled sometimes to goods trucks, were pulled across the ice by horses. It is said that in this way the rolling-stock of the railways east of Lake Baikal was until March 28 increased by 65 engines, 25 passenger carriages, and 2,356 goods vans and trucks, thus by about 60 or 65 military trains in all. This was of the utmost importance, as the Eastern Chinese and Transbaikal Railways could otherwise not have got before the beginning

of May the necessary material required for the unexpected heavy traffic.

As the ice-breakers can usually begin their work again towards the end of April, the rails were taken up at the beginning of April, their removal being completed in due time. The ice-breakers resumed their trips on May 5.

The troops all marched across the lake as long as the ice would last. Every train-load of troops had a rest-day at Inokentjewskaja Station, near Irkutsk, before they marched across the lake. Here, or at Baikal Station, they were given winter clothing, if they had not been already provided with it. Their arrival at Baikal Station was timed for the hours between midnight and 4 a.m., so that the columns could cover the difficult march of 40 kilometres (25 miles) over the ice in one day. The troops marched or partially used sledges, according to the state of the weather and their own condition. 400 sledges in all are said to have been available at first; these, however, could not be used all at once, as their teams had to march back, and, moreover, required certain days of rest. A horse-drawn sledge was assigned to squads of four or five men to carry their baggage; every column was furnished with an additional number of sledges to carry the sick and tired soldiers, as well as ammunition.

Service waggons were moved across the lake with extra horses. The batteries marched with detachments mounted.

The military trains were, as a rule, timed to reach the lake at one hour's interval. The men were served with hot tea before the march began.

The field-kitchens accompanying the troops served them exceedingly well on their march over the lake. Half-way across the ice a station had been built, as is usual in every year, but this time it was on a larger scale, and with extensive halls for warming up, and with waiting-rooms, the men being fed here during a two hours' rest. Lanterns lit up the track at night. The transports did not reach Tanchoi before evening. The men started again by rail as soon as they had been fed. Apart from some chilblains, no other more serious injuries are said to have been recorded during the march across the lake.

The passenger steamers were unable to resume their runs before the end of May. Up to that date the two ice-breaker-ferries could not accomplish more than three trips in twenty-four hours, nor could both together bring across more than two military trains in the same time.

The Russian Minister of Public Traffic, Prince Chilkow, adopted energetic measures for further increasing, as rapidly as possible, the carrying capacity of the railway. Besides augmenting the rolling-stock, he also very largely increased the personnel of the railway. To complete the circum-Baikal railway, which presented extraordinary engineering difficulties, and was not originally intended to be opened until spring 1905, considerable extra allowances were granted so as to carry out its construction with the utmost dispatch. It was further necessary to reconstruct the permanent way of the Siberian Railway with more solid material, and to interpolate more stations, especially on the

Eastern Chinese portion, as some of them were as much as 34 kilometres (21 miles) apart. At the same time the construction of numerous sidings and shunting places was taken in hand, and of new water-towers which could be heated ; the provisional workshops for repairs were enlarged and completed, the organisation of administrative centres for rolling-stock to supply the carriages necessary at a sudden emergency, and generally numerous other engineering works were started. In this way it was possible to raise the carrying capacity of the Siberian Railway until the beginning of May to six double sets of trains. On September 25 the railway turning Lake Baikal could be opened for traffic too. Although the opening of this circum-Baikal line made transports no longer dependent on the conditions of the weather and the ice of Lake Baikal, yet it did not appreciably raise the carrying capacity of the whole line. That capacity was dependent on the nature of the Transbaikal portion, which, owing to its direction and unfavourable structure, permitted only a gradual increase in the number of trains. The number of trains which could pass over that line, therefore, determined all the arrangements which had to be made for the military transports. As it was possible to use by degrees two trains daily for the wants of the line itself and for bringing up building material, thanks to Chilkow's energetic measures the carrying capacity of the line, which had been originally designed to run three or four trains daily either way, and only ran three at the outbreak of war, two of which

were military trains, was at the close of the year raised to ten trains daily in both directions. Some portions of the line could even do more.

The speed of the military trains, including rest-days, was 9·5 kilometres (5·94 miles) per hour. It therefore took a train forty days to go from Warsaw to Mukden. The troops before starting were provided with ear-flaps, fur coats, fur gloves, and felt boots, all these being once more made good before marching across Lake Baikal. All goods-vans for the men's transport were suitably protected against the inclemency of the weather. The floors and sides were lined with felt and one more planking, and the openings had double windows. Iron stoves, moreover, with ample heating capacity, were placed in the vans, and these latter were furnished with such a number of benches that it was possible to form with them a sort of guard-bed for the night for 20 to 32 men. The military trains were at first composed of 35 waggons, and carried about 500 men. At every third station the men were served with hot water to make tea with. But the field-kitchens too, which were carried with trains, permitted boiling water or gruel to be served out at any time. After every third or fourth day, a rest-day was allowed. The manner in which matters were arranged in the places selected for quartering the troops during rest-days had given complete satisfaction during former transports. Pensa, Ssamara, and Tscheljabinsk were chosen in European Russia for such halting places and supply stations, Ob and Krasnojarsk, as well as Inokentjewskaja, were those

beyond the frontier. In the latter place there were quarters for 4,000 men, with lavatories, baths, and sculleries, as well as extensive stabling.

Fifteen more supply stations having been formed between Moscow and Lake Baikal, the transports could be furnished with a hot meal every twenty-four hours. Twenty-two supply stations had been formed east of Lake Baikal. As the supplies could not be found at every supply station, the few goods trains that could be allowed for the wants of the railway itself had also to carry supply stores, building material for dining-halls, kitchen furniture, and objects of a similar nature.

The following procedure was apparently followed in the dispatch of transports to Eastern Asia. Complete units, Army Corps as a rule, were dispatched together. After the departure of such a unit, drafts and military stores were sent for a period of from two to three weeks. Then a fresh unit followed.

For the protection of the railway the whole line, as far back as Tscheljabinsk, and the strip of land belonging to the railway on either side, were put under martial law. Every bridge and similar valuable structure was guarded. The Manchurian line had to be secured against the hordes of Chunchuses by troops of the Frontier Guard even in peace time. The Chinese population was not allowed to have a hand in the construction of the line. The Chinese authorities and the non-Russian population, however, were at the same time held responsible for the safety of the line. The troops guarding the railway were distributed along the Chinese Eastern Railway in defensible guard-houses and barracks.

Thanks to these measures of security it was possible to ward off numerous attempts against the line, and thereby to prevent grave interruptions to traffic.

The traffic on the actual theatre of war was managed by the East Asiatic railway troops, who had been augmented in good time before the outbreak of war.

Blocks in the traffic occurred only in spring 1904, from April 15 to May 7, when the ice of Lake Baikal was melting, and for a few days in December. Delay in the through traffic of the transports was noticeable at the time the rolling-stock for the lines east of Lake Baikal was brought up, and also in consequence of movements of troops from the Southern Ussuri district to Southern Manchuria at the opening of the campaign.

It was a great relief for the military administration that the Russian forces in Eastern Asia could be supplied almost entirely by the country itself; preserves, tea, and sugar, however, had to be brought up by rail.

Mobilisation.

As the small carrying capacity of the Siberian Railway at the outbreak of the war permitted only a gradual increase in the number of trains, and as reinforcements could be dispatched therefore only to a very limited extent, the Russian General Staff was obliged to mobilise the troops only by degrees.

The mobilisation of the troops stationed in the Amur military district, in the Kwan-tung territory, and in Manchuria, was decreed by an Imperial order dated February 5. February 10 was the first day of mobilisation. Their organisation into three Army Corps was ordered at the same time,

and Lieutenant-General Stoessel, hitherto Commandant of Port Arthur, was appointed General Commanding the newly-formed 3rd Siberian Army Corps. The 1st, 2nd, and 3rd Siberian Army Corps were, however, never composed as originally intended. The troops of these corps remained, therefore, after the battle of Liao-yan with the corps with which chance had thrown them together for some time in common action.

The mobilisation of the Siberian reserve troops, and of the Asiatic Cossack armies of the second and third class reserve, west of Lake Baikal, began on February 15.

The following troops were affected by the mobilisation orders of February 5:

A. Field Troops.

1. *Within the Army Corps*

1st Siberian Army Corps: 1st and 2nd East Siberian Rifle Brigade, Ussuri Cavalry Brigade, 1st East Siberian Artillery Brigade, 1st East Siberian Sapper Battalion.

2nd Siberian Army Corps: 5th and 6th East Siberian Rifle Brigade, Transbaikal Cossack Regiment (1st Argunsk), Amur Cossack Regiment and Amur Cossack Demi-Regiment, 2nd East Siberian Artillery Brigade, Transbaikal Artillery Abteilung,[1] 2nd Transbaikal Cossack Battery.

[1] There is no equivalent in English for the word "Abteilung" in Artillery organisation. It would be confusing to translate it into "Brigade," which in English organisation represents the number of batteries in an Abteilung—*i.e.* two to three batteries; but a continental Artillery Brigade is a considerably larger unit, and consists, as a rule, of two regiments, each of two to three Abteilungen—*i.e.* twelve to eighteen batteries.—*Translator.*

3rd Siberian Army Corps: 3rd, 4th, and 9th East Siberian Rifle Brigade (the latter and its Artillery being on the way), 1 machine-gun company, Transbaikal Cossack Brigade, East Siberian Rifle Artillery Abteilung, 1st Transbaikal Cossack Battery, 3rd East Siberian Sapper Battalion (on the way).

2. *Outside the Army Corps*

(1) 2nd Brigade of 31st Infantry Division with 2nd Abteilung of the 31st Artillery Brigade; 2nd Brigade of 35th Infantry Division with 2nd Abteilung of 35th Artillery Brigade; 1st Siberian Infantry Division; Transbaikal Cossack Division of second and third reserves; 3rd Werchneudinsk Cossack Regiment; 3rd, 4th, 5th, 6th Transbaikal Cossack Batteries; 2nd East Siberian Sapper Battalion.

(2) 7th East Siberian Rifle Brigade (Port Arthur).

(3) 8th East Siberian Rifle Brigade (Vladivostok).

B. Fortress Troops

Vladivostok: 2 Garrison Artillery Battalions, 1 Fortress Sapper Company, 1 Fortress Mining Company.

Nikolajewsk: 1 Fortress Infantry Battalion, 1 Garrison Artillery Company, 1 Fortress Mining Company.

Possjet Bay: 1 Garrison Artillery Detachment, 1 Fortress Mining Company.

Port Arthur: 2 Garrison Artillery Battalions, Kwan-tung Sapper Company.[1]

C. Railway Troops

Ussuri Railway Brigade, Trans-Amur Railway Brigade.

D. Troops guarding Railways

Frontier Guards of Trans-Amur district: 55 companies, 55 sotnias, 16 batteries.

By an order of February 10 *the mobilisation of the following troops was decreed:*

4th Siberian Army Corps: 2nd Siberian Infantry Division with 1st and 2nd Independent Siberian Artillery Abteilung, 3rd Siberian Infantry Division with 3rd and 4th Independent Siberian Artillery Abteilung, Siberian Cossack Division of second and third reserves (4th, 7th, 5th, 8th Siberian Cossack Regiments), 6th and 9th Siberian Cossack Regiments of second and third reserves, independent detachment of first, second, and third Irkutsk and Krasnojarsk Cossack reserves (a sotnia each), 4th East Siberian Sapper Battalion.

In Europe were mobilised the following supplementary troops for reorganising the East Asiatic forces:

Thirty-two third battalions for reorganising the East Siberian Rifle Brigades Nos. 1 to 6 and 8 and 9 into Rifle Divisions; twenty-two batteries for reorganising the East Asiatic Artillery into Artillery Brigades of four batteries each, with the

[1] The other fortress troops, given in Appendix VII., were formed partly shortly before, partly immediately after the outbreak of war.

exception of the Artillery of the 7th and 8th East Siberian Rifle Division; 3rd East Siberian Sapper battalion; East Siberian Bridging battalion.[1]

It is apparent from the measures adopted by Russia on mobilisation, that she thought it necessary at the outbreak of war to depart from her originally intended and carefully prepared plan of mobilisation.

The Russian forces in East Asia were completely reorganised at the beginning of the war. Russia improvised during the first three months of the campaign a heterogeneous new East Siberian Army from her East Asiatic troops as they were and from units drawn from almost every European corps. An Imperial decree of February 23 ordered the reorganisation of the East Siberian Rifle Brigades into Rifle Divisions, by raising the Rifle Regiments to a strength of three battalions. With the exception of the 7th and 8th Rifle Divisions, to which Artillery Brigades of three batteries were apportioned, all divisions had Artillery brigades of four batteries.

The mobilisation of the regular *East Siberian* troops proceeded pretty smoothly, as they could draw their few reservists to complete the war establishment, as well as the horses for the necessary trains, from the eastern provinces, but the two European brigades, *i.e.* the 2nd brigades of 31st and 35th Infantry Divisions respectively, had to be brought up to war strength by reservists from Europe. All *Siberian* troops, on the other hand, including the 1st Siberian Infantry Division, were

[1] Arrived in the Far East by the end of April.

brought up to war strength by drawing from the Siberian military district and from five European counties. For the formation of the three Siberian Infantry Divisions, only three reserve brigades, with four cadre-battalions each, and in all two Siberian reserve batteries, were available. Seventy-two battalions had to be formed from these twelve cadre-battalions.[1] While the East Siberian troops received only regular European officers with their drafts, the want of officers with the Siberian troops was made good by appointing to them regular and reserve, as well as retired officers. The European regiments made up their establishment in the regular way from their reserve and acting officers, as well as from regular officers of non-mobilised units.

As it took the reservists of the three Siberian Infantry Divisions a long time to reach their places of mobilisation on account of the indifferent communications, and the great distance of the garrisons of some of the units, their assembly and entraining caused a great deal of difficulty, especially as many of the mobilised units were as much as 600 kilometres (375 miles) away from the railway. The Infantry of the 2nd and 3rd Siberian Infantry Division required, therefore, 19 to 41 days; the Siberian Cossack Regiments of the second and third reserve 7 to 21 days; and the Siberian Artillery units 18 to 51 days before they were ready to march.

The Siberian Railway being engaged until the

[1] Twelve regiments of four battalions each, twelve single battalions, and twelve depôt battalions.

middle of April by the extensive transports of drafts required for the re-formation of the East Asiatic units, and having moreover to run trains at the same time with material for arming the fortresses, and with naval and military stores of all kinds, Russian Headquarters had in addition to the East Siberian Forces, which had mobilised in the Far East, no other troops available until the end of April, when the 1st Siberian Infantry Division and the Transbaikal Cossacks of the second and third class reserves were timed to arrive.

The gradual dispatch of the remainder of the troops detailed for East Asia was caused, as we have seen, by the limited number of trains that could be run, and will be best apparent from the statement below:

The following units engaged the Siberian Railway: In January, the 9th East Siberian Rifle Brigade with its Artillery, 3rd Sapper Battalion, and reserves for the two European Infantry Brigades of the 31st and 35th Infantry Division and their Artillery units.

From the middle of February to the middle of April 1904: the thirty-two third battalions required for reorganising the Rifle Brigades into divisions, and for forming the three Siberian Army Corps; further reserves, twenty-two batteries, and technical troops; the portion of the line east of Lake Baikal was engaged by the 1st Siberian Infantry Division.

From the middle of April 1904 to the middle of June: the 4th Siberian Army Corps stationed west

of Lake Baikal (2nd and 3rd Siberian Infantry Division), and six regiments Siberian Cossacks.

From the beginning of May to the middle of July: the Orenburg Cossack Division, and two Ural Cossack regiments.

European units, complete and of any size, were not mobilised until after the action on the Ya-lu. The dispatch of the 10th and 17th Army Corps and of the 5th Siberian Army Corps (54th and 71st Infantry [Reserve] Divisions) was, therefore, not begun until the middle of May. The last trains of the 10th Army Corps arrived in Manchuria at the beginning of July, of the 17th at the end of July, and of the 5th Siberian not before the end of August.

The reorganisation of the first three Siberian Army Corps could only just be carried through in the main by the end of April. The augmentations for the Artillery on the Ya-lu had not arrived there by May 1.

B. JAPAN'S FORCES AT THE OUTBREAK OF WAR.

JAPAN'S INTENTIONS

The origin of the Japanese Army.

When Japan, three decades ago, determined to completely reorganise her whole Government, there was no branch of it that could build on a better foundation for its transformation than the Army that was to be newly created. For Japan had at that time not only a vigorous, intelligent population of more than thirty millions, but a population animated with an almost fanatical patriotism, and with a devotion to their Sovereign, resting on their

religious convictions, which made them bear without grumbling all the hardships of personal military service. Moreover, the members of their former caste of warriors, the Samurais, provided an excellent material of leaders and soldiers, who, it is true, had still to learn all the technical parts of their profession, but who, by their martial traditions from time immemorial, by the sense of honour inculcated in them, and by their love of chivalrous sports, were excellently prepared for their new task. The limited material resources of the country alone threatened to become a hindrance to the sound development of up-to-date military organisation. Yet even these difficulties vanished in the face of the self-sacrificing spirit of the whole nation, and of the industry and frugality of the Japanese workmen, officials, soldiers, and officers. Thus, in the course of some thirty years, an army could be created which had no need to shun comparison with any of its European patterns.

From 1872 Imperial troops were raised and organised in Japan in place of the feudal retainers of the Daimyos, or hereditary governors. In 1873 universal service was introduced, with the consequent possibility of considerably increasing the army thereby. Though but small at first (originally it counted not more than about 40,000 men), it rapidly grew in numbers and value under the guidance of French officers. A number of Japanese officers, and among them many who are now taking a leading part in the Japanese army, were sent to France for their military education. The new troops soon proved their

worth in the Saga and Satsuma revolts, which broke out in the middle of the seventies.

It is characteristic of the Japanese that one of their first military creations was the Military Academy, and that from the outset they tried to manufacture their own arms and ammunition. About the middle of the eighties the then Major Meckel began a successful course of instruction in the Japanese army. His labours were continued to the middle of the nineties by Captain von Blankenburg and Majors von Wildenbruch and Freiherr von Grutschreiber. From this time dates the close similarity with German military institutions that can be traced in the organisation and administration of the army, in the regulations and in the views of the officer-corps, and which was still further promoted by the mission of numerous officers to Germany.

Before the outbreak of the Chino-Japanese War the army consisted already of seven divisions[1] (shidan); after the war their number was raised to thirteen, and armaments and training were unceasingly perfected.

Distribution of command and organisation of the Japanese army.

As in Germany, the chief command of the army is vested in the Emperor, to whom the War Minister, the Chief of the General Staff, and the Inspector-General of Military Education are directly responsible. War Office and General Staff exercise about the same functions, and are similarly constituted as the like-named German authorities, with this difference, however, that the Japanese War Minister wields in peace time a

[1] Without Army Corps organisation.

certain amount of command. The Inspector-General of Military Education is not only the head of the military colleges, where the rising generation of officers is trained, but the Inspectors of Cavalry, Field and Garrison Artillery, the Engineers, and the Army Service Corps are also subordinate to him. For advising the Mikado on all matters concerning the army, two authorities exist: the Marshal Council and the Military Council, the latter being composed of the War Minister, the Naval Minister, the Chiefs of the General Staffs of the Army and Navy, and the Inspector-General of Military Education. Annually one of the marshals was, similarly to a German Inspector-General of Army, charged with reviewing several divisions; but there was no permanent institution of this kind of Inspector.

The peace organisation of the army is an imitation of the German, and is given in Appendix II. The peace establishment before the outbreak of war was, according to Japanese statements, 6,993 officers, 152,664 men, 22,015 horses, and 720 guns. Appendix II.

The obligation to serve is universal, and, before the war, lasted from the age of eighteen to forty. Owing to the low peace establishments there could be no question of training uniformly all those who were able to serve; for example, in 1901 there were 187,901 recruits fit and liable to serve. The authorities saw best to call up for regular service a small portion only of those liable to serve, while the majority was formed into a superficially, or not at all, trained Special Reserve, in like Recruiting the army.

manner as was done in Germany until 1893, with a small portion of the reserves. In addition, there was the system of the one-year volunteers as in Germany. The terms of liability for service are apparent from Appendix III. But as in the course of the campaign the want of trained men was felt on account of the low peace establishment, and as the law prohibited the employment outside the home country of trained men belonging to the first class of the Landsturm,[1] a change was made in September 1904, by altering the liability to serve in such a way that just these older annual contingents of trained men became available for service abroad. Men of the reserve, however, who had been trained superficially, or not at all, were already before this alteration in the law relating to military service available in very large numbers for expanding the peace army, small as that army was according to European notions. Their enrolment was rendered easy by the excellent physical and mental qualities of these recruits, but found its limits in the small number of officers who were available. If the campaign had lasted for some time longer, serious difficulties would probably have arisen from that fact.

Appendix III.

For the purposes of recruiting the army in peace and war, the country is divided into twelve divisional districts, which are again sub-divided into fifty-two regimental districts, corresponding to the German battalion districts, and some special districts. The Infantry of the Guards is

[1] Men who had finished their time in the reserve and Landwehr.—*Translator.*

recruited from the whole country, the other arms of the Guards from the 1st Divisional District. As the Divisions of the Line are all quartered in their recruiting districts, a rapid and smooth mobilisation is greatly facilitated.

The troops in Formosa were recruited by quotas from other units. There were, moreover, on some of the smaller islands local Militias of former times, and on Hokkaïdo the remnants of ancient military colonies.

The corps of officers is recruited partly from the Cadets Corps and those military schools which are about on a level with the German schools of nobles, and partly from Military Aspirants, who, after passing an entrance examination, join any unit of the service. Both types pass through a one-year's course of instruction at the Officers' (War) School before receiving their commissions as officers. The number attending these courses of instruction was 450; it was considerably increased during the war. Besides the officers who are trained in this manner, there is also a number of them who have risen from the ranks. Efforts are being made to pass all future candidates through the Cadet Corps.

With the object of covering the demands for leaders in case of war, suitable candidates of the one-year volunteers were trained to become reserve officers.

Marshal Yamagata.

To fill the places of superior commanders, Japan was able to dispose of a sufficient number of officers who had already taken a leading part in the war with China. The foremost leader of the Japanese

army in that campaign, Marshal Yamagata, could not, it is true, take command on account of his health, but in return for it he, who had the reputation of being Japan's ablest general and best statesman, and of enjoying his Emperor's unlimited confidence, retained a leading influence on the whole military and political affairs of the country as President of the Privy Council, and later as Chief of the General Staff.[1]

Marshal Oyama.

The Field Army was to be commanded by Marshal Oyama, who had already been at its head in 1894, after Marshal Yamagata had fallen ill. Sixty-two years old, he was holding the office of Chief of the General Staff of the Army when the war broke out. In 1870-71 he was in Paris as an attaché of the Japanese Legation, while that city was being invested; he had distinguished himself as commander of a flying column during the revolts of the seventies, and at the head of the 2nd Army he captured Port Arthur in 1894. His appointment as Commander-in-Chief, they say, was not so much due to his qualities as a leader, as to the great authority he enjoyed and to the wish of securing to General Kodama, his Chief of the Staff, a decisive influence on the conduct of operations without hurting the seniority of the other army commanders. The Marshal placed implicit confidence in Kodama.

General Kodama

General Kodama's was a splendid career in every respect.[2] As a colonel he was prominently engaged

[1] After Oyama had been appointed Commander-in-Chief of the Field Forces.

[2] Died July 23, 1906.

in the defence of Kumamoto Castle (1877) during the Satsuma revolt. Later on he was one of Meckel's pupils, and visited Germany and other countries of Europe in 1890. After his return he occupied, simultaneously or in succession, the posts of Vice-War Minister, War Minister, Governor-General of Formosa, and finally, while retaining the latter post, also that of Vice-Chief of the General Staff of the army. He proved himself a clear-headed, energetic, vivacious, indefatigable, and resolute man. Together with Marshal Yamagata, he had the reputation of being the most capable of Japanese generals.

General Fukushima.

With him the Quartermaster-General (General Fukushima) took a prominent part in the conduct of operations. The generals who were marked out as commanders of an army (Generals Kuroki, Oku, Nodzu, and Nogi) had all earned their first martial distinction in the revolts of the seventies, and had rendered prominent services as divisional or brigade commanders in the war with China.

General Kuroki.

General Kuroki was born on March 16, 1844. In 1871 he was made Captain and Section-Commander of the 1st Battalion Imperial Bodyguard. Having been promoted Major in 1872, he held various appointments during the next years. In 1879 he was made Colonel of the 2nd Guard Regiment. In February 1882 came his appointment as General Staff Officer to the Inspector-General of the Central Districts; in 1885 he was made Major-General and Commander of the 5th Infantry Brigade; in 1893 Lieutenant-General and Commander of the 6th Division. In this position

Kuroki took part with his division in the war with China in 1895, and was present at the assault on Wei-hai-wei. In the year following he was appointed Commander of the Guard Division, and in 1897 Commander of the Western Corps. Having been promoted General in November 1903, this deserving officer, who had been made a baron after the war with China, was called at the head of the 1st Army in February 1904.

Officers and men.

The officers of the lower grades as well had mostly seen some active service. Many had enlarged their knowledge and capabilities by serving in European armies; all, at any rate, had worked hard at their professional education at manœuvres and at the military colleges with the zeal that is so characteristic of the Japanese. They were filled to a high degree with the warlike spirit with which the whole Army was animated, and which was deepened by the traditions of the old Samurai-dom and by the rules of conduct laid down in the Bushido.[1]

Finally, the men were rightly considered a most excellent material, as was evinced by their success. Physical endurance, skill of the individual man, professional training, and the discipline everywhere noticeable, inborn martial spirit, and natural intrepidity—all these qualities gave rise the more to expectations of great deeds, since the education at the schools and in the army was endeavouring, with much skill and ability, to develop all the

[1] Literally, "chivalrous conduct in action," a doctrine of knightly manners and honour, transmitted partly by word of mouth, and partly in writing.

most valuable military virtues. The unanimous enthusiasm of the whole nation for the war with Russia (whose progress in Eastern Asia was looked upon from the outset as an encroachment upon the honour and the interests of the State), the patriotism which was equally alert in all classes, and the indifference to pain and danger which Shintoism and Buddhism promoted in equal measure, still further enhanced the military value of the individual soldier. Yet there were considerable differences in the military usefulness of some of the recruits. The performance of units recruiting from purely country districts were, in the opinion of the Japanese commanders, and from what the foreign officers observed, undoubtedly much better than the performances of those units which recruited from industrial centres. The superior value of the 2nd and 12th Divisions, that could be clearly discerned, was chiefly due to their recruits coming from rural districts.

Training.

All arms had been trained for years in accordance with regulations which, in all essentials, were identical with those in Germany. Especially the combat of Infantry was based throughout on the principles of the German Infantry Drill of 1888, the large discretion allowed in that book, to act in each case according to circumstances, being intelligently interpreted. After the experiences of the war with China, special stress seems to have been laid in peace training upon the rapid development of strong firing lines—by extending whole companies as a rule—upon a very rapid advance without long halts in firing positions if

possible, upon the use of entrenching tools for securing any ground captured, and, in the attack and defence of fortified positions, on skilful use of ground, and on night attacks. European observers highly appreciated the achievements of the Japanese Infantry already before the war; they had special praise for the skilful execution of manœuvres in close order, and for the fire discipline. The Cavalry as compared with Infantry were somewhat handicapped owing to their small numbers and their indifferent mounts, whilst the Artillery was said to have shown fair practice, and was at any rate imbued with the principles of the most intimate co-operation with Infantry.

The whole army had been animated before the outbreak of war by an ardent zeal and lively desire to attain perfection. Even the difficulties arising from the nature of the country for a sound warlike training they had known how to conquer.

Equipment, armament, and clothing.

Equipment and clothing of the Japanese army were simple and practical: blue-black tunics, trousers with coloured stripes to distinguish the various arms, a field cap similar to the German, lace-boots with gaiters of cloth, in the mounted branches Blücher-boots, few or no badges at all. As war went on, khaki took the place of the blue-black uniforms, being well adapted for the Manchurian country; the new tunics and great-coats were partially worn on top of the old clothing; this was done, to some extent, to guard against the cold.

The Infantry of the field regiments was armed with the 6·5 millimetre (·26 inch) Arisaka rifle

(Meiji 30) M. 97, dating from the year 1897, and being a multi-loader after the Mauser system. The reserve forces were at first armed with the Murata rifle, an arm about the same as the German rifle of 1888, but already after the battle of Liao-yan some, and after the battle of Mukden all, troops of the second line were likewise equipped with the Arisaka rifle. A man carried 120 rounds, which were distributed in three pouches: two in front and one behind. Before entering into action he was, moreover, amply supplied with rounds from the small-arm ammunition carts and ammunition columns, which rounds he stored in his haversack and other pockets. We do not overstate the estimate if we say that every Infantry soldier went into action with 250 rounds.

The Cavalry was armed with the sword, and a carbine similar to the Infantry rifle.

The arms of the Field Artillery were the 7·5 centimetre (3 inch) Arisaka field or mountain guns which had a rope brake and drags, but neither protective shields[1] nor automatic recoil mechanism, and was in regard to its efficiency and rapidity of fire somewhat on a par with the German gun of 1896.

The following calibres of guns for heavy Artillery of the Field Army were available: Krupp's 10·5 centimetre (4·2 inch) Q.F. guns, 12 centimetre (4·8 inch) guns, Krupp's 12 centimetre (4·8 inch) and 15 centimetre (6 inch) howitzers, 9 centimetre (3·6 inch) and 15 centi-

[1] Protective shields, but of an inefficient kind, were afterwards fixed to them in winter 1904-5.

metre (6 inch) mortars. The personnel was drawn from the Garrison Artillery regiments.

Of Hotchkiss machine guns, there were at first small numbers only. Separate machine-gun units did not exist.

Horses.

Horses were a weak point in the Japanese armour. The Japanese horse is small, and in spite of its endurance is neither specially suitable for riding nor driving. Efforts had been directed to improving the supply of horses, but the effect of these efforts could not as yet be felt in the impending war. Reconnaissance by Cavalry and mobility of Field Artillery were bound to suffer under these circumstances on the theatre of war, with its few and bad roads.

Mobilisation.

The mobilisation of the Japanese Army in 1894, and, as far as was required, in 1900, went off smoothly and quietly. No doubt it had been thoroughly prepared for the enlarged army as well. The originally planned War Organisation, as far as it can be ascertained, is apparent from Appendix IV. It was not a final one, but was further developed during the war according to wants and as circumstances permitted. The reserve generally served to fill up the regular field forces and their depôt battalions, squadrons, etc. In the latter were also incorporated the special reservists, and soon afterwards the annual contingent of recruits due in 1904 joined these too, the contingent of these recruits being raised to 100,000 men in that year. From the untrained special reservists were mainly drawn the numerous carriers, for whom employment was found on the lines of communication, especially

Appendix IV.

in Korea and in the East Manchurian highlands. The Landwehr served to form the units of what were called the Reserve Troops. How far the National (Garrison) Army, which was raised from the Landsturm,[1] had been called up, must be left an open question,

The comparatively long period of about three weeks was required for the general mobilisation of the Regular Army, chiefly owing to the small carrying power of the railways, the formation of the units of the second line demanding even a very much longer time still. But since the naval transport could anyhow proceed but gradually, it was considered sufficient if mobilisation was carried out step by step, beginning on February 5 with the Guard, 2nd and 12th Divisions, and finishing with them on February 14. It went off without delays occurring in the dispatch of trains; the accelerated concentration of those portions which were to be embarked first came off as well without any friction. Mobilisation of the Reserve Formations proceeded contemporary with their corresponding Regular Divisions. The Reserves came up to a man. The number of men missing is said to have been very small indeed. The deficiency in horses was made good as much as possible by purchases abroad. Greater difficulties were caused by the want of officers, since, besides the regular officers, there were but roughly 3,400 Reserve and Landwehr officers according to a return which, it is true, dates from 1901. The gaps in the corps of officers were partially filled

[1] *Vide* footnote on p. 92.

by giving commissions to non-commissioned officers and by an early promotion of war-school pupils. The regulations for admission of candidates for a commission had also to be twice given a wider range in the course of the campaign.

Means of naval transport.

Deducting the merchant steamers required for naval purposes, there were still some 135 ships left for naval transports, with a tonnage of 315,000 tons, so that about five divisions could be embarked simultaneously—that is to say, two more than the Japanese staff had intended to send. It being a short voyage, there was no necessity for making any troublesome alterations on board the ships. For embarkation of a division at least three days had to be allowed. The duration of naval transit and disembarkation depended on the point selected for landing. Constituted as the Korean and Liaotung coasts were, five days at the very least had to be counted for the landing of a division. Reckoning in addition the time for the return voyage, and for refitting the ships, it became necessary to allow about fifteen days for the transport of each échelon, a time which might easily expand to twenty and even more days by unforeseen contingencies.

The navy.

But to venture on a landing on the continent at all, Japan needed, in addition to her mobilised army, a strong fleet as well. The idea that Japan would want an up-to-date navy if she wished her voice to be listened to abroad was so obvious on account of her insular position, that the efforts of the newly awakening country to create a navy, in spite of her limited resources, took shape indeed

sooner than her efforts for creating an army. These endeavours commenced about the year 1870, and continued, at first with the guidance of British naval officers, during the seventies and eighties. At the time of the war with China, Japan possessed already a small but efficient fleet, which proved its thorough value in the action on the Ya-lu against the superior Chinese ships. The necessary harbours and dockyards had been constructed, and every nerve was strained to become independent of European yards for building ships; for the moment, however, all the larger ships were still being built abroad. After the war with China, Japan quickened her pace in all branches, and, of course, in the navy as well. For it was now a question of getting the start at sea of her new enemy Russia, without which the impending struggle for the supremacy in the Far East could not be fought out successfully.

At the cost of £23,500,000, which is small when compared with what had been achieved, but enormous considering Japan's resources, a fleet was ready to strike at the end of 1903, the composition of which is apparent from Appendix V., where it is also compared with the number of ships of the Russian fleet in Eastern Asia. The Japanese battleships surpassed the Russian in size, speed, and artillery. This advantage, and the marked superiority in efficient armoured cruisers, secured Japan a preponderance over the Russian warships in the Far East that was, of course, for the moment only a conditional one.

Appendix V.

An efficient personnel of 50,000 men all told,[1] and

[1] Reserves included.

well trained after the English model, was available for manning the fleet.

The fleet—of which, as a rule, a small portion only was in commission—fourteen ships (without torpedo-boats) in 1901—had been gradually mobilised since summer 1903, and lay concentrated with its main body at Saseho in January 1904. Two large cruisers, bought in Italy, were still in the Indian Ocean. A considerable portion of the Japanese mercantile fleet was probably also held ready for purposes of transport before the outbreak of war. Thus everything had been done that could be done before hostilities began to ensure a successful opening of the campaign.

The Japanese plan of operations.

The land forces of their adversary in Eastern Asia, at the end of 1903, were estimated too low by the Japanese General Staff, namely, at 50,000 to 60,000 men,[1] including about 10,000 railway guards. It was hoped that a further increase of the Russian land forces by sea could be prevented, and it was presumed that a Russian army of 140,000 to 150,000 men could not be assembled at Mukden before August 1904 by transport on land, a presumption which considerably underrated the carrying capacity of the Siberian Railway. Regarding the distribution of the Russian forces, apart from their distribution in peace, it was known that Russian troops, at the time of rupture in the diplomatic relations, were assembled at Port Arthur, on the Ya-lu, and at Vladivostok, while the main body of the fleet was at Port Arthur, a smaller squadron in the harbour of Vladivostok,

[1] *Vide* p. 56.

and some isolated ships at Tsche-mul-po and in various Chinese ports.

Japan was determined to conduct the war offensively from the very beginning, as was but natural, considering her political object: conquest of Korea and destruction of Russian power in Manchuria. A landing on the Asiatic continent, which would be therefore necessary, had to be effected within striking distance of the main body of the Russian fleet; to ensure a safe landing against any interruption by the Russian fleet was therefore the first duty of the Japanese staff. It would then be best to open war with an offensive stroke of the Japanese squadrons against the Port Arthur fleet. But as it was not safe to rely upon a rapid destruction of the Russian naval forces in the Bay of Korea, and as a landing at the only port of Gensan, on the east coast, was threatened from Vladivostok, the Japanese General Staff had agreed not to mind the long lines of advance in case of need, and to land the troops at the nearest and safest ports on the Korean south coast at Fu-san and Ma-san-po. Consequently, a rapid occupation of the politically important town and road-junction of Söul was also abandoned. But a landing further north on the Korean west coast and a more rapid capture of Söul were kept in view from the outset, if the first naval engagements should turn out successful. At the same time it had to be remembered that some of the northern harbours of Korea and of the Liao-tung peninsula would still be ice-bound for some time after the outbreak of war. It was thought, moreover, that the Russians might

assume the offensive in Korea, when it was hoped to draw them as far south as possible, and then to beat them. Should they remain behind the Ya-lu, they were to be attacked there and pushed north while more forces were going to land on the Liao-tung peninsula at the same time. In this way the Japanese hoped to separate the Russian forces, and then to advance concentrically on Liao-yan, which was kept in view as the first objective of the operations on land.

IV

SUMMARY OF THE EVENTS AT SEA UP TO THE DEATH OF ADMIRAL MAKAROW—LANDING OF THE FIRST JAPANESE ARMY

WHILE diplomatic negotiations between Russia and Japan came to a head in the first days of February 1904, the Japanese fleet, commanded by Vice-Admiral Togo, lay concentrated and ready for action in Saseho and Moji, on the west coast of Kiushiu. The Russians, on the other hand, hoping to be able to avoid a rupture, or at least to postpone it, had abstained from any open hostile measures, and, in particular, from any thorough reconnaissance of the Japanese harbours. The four cruisers permanently stationed at Vladivostok, as well as the vessels that had been sent to Tschemul-po, Yin-kou, and Shanghai, were left at those places.

Japan opens hostilities by sea.

Whilst the Japanese fleet, apart from reconnaissances by Japanese returning from the continent and by agents, had been most minutely informed of all that was happening on the enemy's side, the Russians remained in complete ignorance of the near approach of war, and of the whereabouts and intentions of the hostile fleet.

Without a declaration of war intimating the opening of hostilities, Admiral Togo began to move on February 6 at first towards the Korean west coast. He left some ships in the Straits of Korea to watch the Russian cruisers stationed in Vladivostok; he sent Admiral Uriu with five of the older cruisers, one gunboat, and six torpedo-boats to Tsche-mul-po, where he was to cover the disembarkation of the troops to be landed there, and then himself steamed onward with six battleships, four armoured cruisers, four protected cruisers, and eighteen torpedo-boats[1] in the direction of Port Arthur.

There, at Port Arthur, the Russian fleet had gone to the outer roadstead, so as not to be shut up in the confined harbour; but as no one had the slightest idea of the proximity of the danger that was impending, no special measures of security had been adopted, in spite of the easy access to the anchorage.

Admiral Togo sighted Port Arthur on the evening of February 8, and, being well informed of the position of the Russian fleet, resolved to make a torpedo attack that same night. The boats employed for that object succeeded in seriously damaging the battleships *Cesarewitsh* and *Retwisan*, as well as the large cruiser *Pallada*. *Cesarewitsh* and *Pallada* were able to gain the inner harbour, but *Retwisan* grounded near the narrow entrance, and remained there for some considerable time.

[1] This distribution of Japanese ships was not a permanent one; the detachment charged with watching the Vladivostok cruisers, in particular, was reinforced from the main fleet as occasion demanded.

Next day the Japanese fleet opened fire on the fortifications of Port Arthur and on the Russian squadron, without doing much damage on the whole. But on February 11 and 12 the Russian fleet lost through their own submarine mines in the Ta-liën-wan Bay the mining ship *Jenissei* and the small cruiser *Bojarin*. Discouraged by these accidents it abandoned any offensive action, withdrew into the inner harbour, and confined itself to short reconnaissances with individual ships. The group of cruisers in Vladivostok also ceased their activity after a brief cruise in northern Japanese waters owing to the unfavourable conditions of the weather.

The two Russian cruisers in Tsche-mul-po, *Warjag* and *Korejetz*, after the latter had exchanged some shots with several Japanese torpedo-boats already on February 8, were on the 9th summoned by Admiral Uriu, who had meanwhile arrived before Tsche-mul-po, to leave the harbour by 12 noon, else he would attack them without regard to the neutrality of the port. The Russian commander, Captain Rudnjew, tried to cut his way through under these circumstances; the superior fire of the Japanese cruisers, however, caused such heavy damage and loss to the *Warjag* that both ships had to return. In view of the impossibility of escape, Captain Rudnjew sank both ships in the harbour and brought his men in safety on board the neutral men-of-war that were present in the harbour.

After this success there was no obstacle in the way of the Japanese to land at Tsche-mul-po.

The first troops of the Japanese 12th Division are landed at Tsche-mul-po.

The landing had been prepared beforehand by Admiral Uriu's squadron, being followed immediately by transports having on board four battalions of the 12th Division, which was garrisoning in the south-western part of Japan. These were now landed at once, occupied Söul as early as February 10, and seized the railway leading to that town. About the same time Fu-san, Ma-san-po, and Gensan were occupied by Japanese troops, though no landings had been planned there. It was probably done merely for the purpose of securing these ports, as being nearest to Japan in case of a reverse, and also to prevent the Vladivostok cruisers from using Gensan. During the next days, February 13 to 27, the other troops of the 12th Division then disembarked at Tsche-mul-po, a portion of the division landing also at Hä-tju, 60 kilometres (37½ miles) north-west of Tsche-mul-po.

Sketches 1 and 3.

Disembarkation was favoured by the calmness of the weather. An eye-witness has testified to its excellent organisation; it proceeded with the greatest quietness and order imaginable, and, considering the conditions of the coast,[1] with great rapidity. For a few hours only was the work interrupted, when on account of the low tide no lighters could pass the bar. In addition to the existing ramps of rough stones, two boat-bridges of twenty junks each were built for landing purposes. The disembarkation of the horses went off without a hitch as well, in spite of the strong tidal currents. Although no special precautionary

[1] Pages 22, 23.

measures had been adopted, there were almost no accidents to register.

The troops that had been landed remained in the first instance and for the most part in Söul. Only a small detachment was pushed to Pyöng-yang, to secure this town, which was important for an advance towards the Ya-lu and for the use of Tschi-nam-po harbour; it arrived there on February 28, after an unimportant skirmish with Cossacks on the previous day. But before its arrival the officer appointed to act as depôt-commandant in Pyöng-yang had entered that town. On the intelligence of the appearance of Russian Cavalry in Northern Korea he had started on his own initiative by forced marches from Söul with only a single section of Infantry, and then had set to work at once, with the aid of Japanese inhabitants of Pyöng-yang, to put the town in a state of defence.

Being impressed by the display of Japanese power, the ruler of Korea concluded a treaty of alliance with Japan at the end of February, which, though not adding to the military power of Japan, certainly gave her the necessary influence for shaping things in Korea so as to make her operations and lines of communications perfectly safe.

During these marches the nature of the roads and supplies proved already so badly beyond all expectations that the most elaborate measures had to be adopted for the advance of the 12th Division, such as improvement of roads, formation of magazines in advance, etc. It became, therefore, the more important for the Japanese Headquarters to

Appendix VI.

arrange for the landing of the remainder of the troops of the 1st Army, which was to go to Korea, at Tschi-nam-po, thus shortening by more than half the road to the Ya-lu. The exact time for this landing could be determined by the date on which the harbour of Tschi-nam-po would be free of ice, and from experience this was known to be the case about March 10.

Further naval events before Port Arthur.

The transport of the troops of the 1st Army to Tschi-nam-po and their landing there needed particular protection against the Russian fleet, owing to the short distance from Port Arthur. It is probable that on this account Admiral Togo's squadron remained also in the second half of February in the neighbourhood of Port Arthur, in spite of heavy snowstorms. On the evening of February 24 he made an attempt to paralyse the hostile fleet once for all by blocking the entrance into the harbour. The ships, however, which were intended to be sunk in the narrow channel were prevented from carrying out their task by the fire from the battleship *Retwisan*, which was still lying fast near the entrance, and from the coast batteries. A torpedo attack on the *Retwisan* during the next night failed as well; a renewed bombardment of the town and harbour had no better result than the first. The Russians only suffered some loss in the various torpedo-boat attacks.

On March 8 Admiral Makarow assumed command of the Russian fleet. He knew how to raise afresh the low spirit of the sailors, and succeeded in removing the *Retwisan* from the

entrance of the harbour, where this ship had hampered the fleet in readily putting to sea.

Admiral Togo, on the other hand, to meet the increasing danger of an offensive Russian move, laid out mines at the mouth of the harbour during the night of March 9-10, without, however, succeeding in blocking it effectively. This was followed by a torpedo-boat action, which caused great loss to the Russians, and by another bombardment on the part of the Japanese, this time with indirect fire from the neighbourhood west of Cape Lau-tië-schan-tau. Although the offensive power of the Russian fleet was not at all weakened by these events to such an extent as might have been desired by the Japanese for resuming the naval transports, yet Makarow, in view of the Japanese superiority, which was enhanced by the losses of the Russian fleet, did not see his way to undertake any more extensive operations that would probably have forced him to fight a decisive battle.

The Japanese Guard and 2nd Divisions are transported to Korea.

Although an irruption by the Russian fleet was still possible, the first transports, which were to bring the Guard and 2nd Divisions to Korea, left Ujina[1] on March 11, and reached Tschi-nam-po unmolested under escort of a cruiser detachment.

The 12th Division begins its advance on Pyöng-yang.

The 12th Division in Korea had begun its advance on Pyöng-yang in échelons of two to three battalions after it had been relieved in Söul and along the line of communications by Reserve troops. As, however, Headquarters had calculated that only a portion of the division could reach

[1] Close to Hiro-shi-ma.

Pyöng-yang under favourable circumstances before disembarkation began at Tschi-nam-po,[1] and as the occupation of that town by a detachment that had previously been sent there had apparently not come to the knowledge of Headquarters, a battalion and six squadrons were landed first on March 13, with orders to clear the neighbourhood of Pyöng-yang of Russian Cavalry. This detachment then advanced on An-tju, where it arrived on the 18th. About the same time the 12th Division gradually arrived at Pyöng-yang, and pushed its own detachments to Ka-tschön and An-tju. In this way five battalions and eight squadrons appeared one after the other at the Tschöng-tschön-kang; under their protection the disembarkation of the Guard and 2nd Divisions proceeded in all comfort. Little is known about how the landing was effected; at best it was but a slow proceeding owing to the difficulties prevailing everywhere in the ports on the western coast of Korea.[2] It lasted with the Guard Division from March 18-25, and with the 2nd Division from March 24-7. Only the heavy Artillery of the Field Army was not landed for the present, as their point of disembarkation had, owing to bad roads, to be selected as close as possible to their future place of employment.

The troops that had been landed were assembled at Pyöng-yang. The two Engineer battalions

[1] The roads were so defective that the vehicles of the division were re-embarked, and afterwards again landed at Tschi-nam-po. The Artillery, on the other hand, which consisted of mountain guns only, was able to march with the division.

[2] Pp. 22, 23.

which were disembarked immediately behind the covering detachment at once set to work, together with the line-of-communication troops, to carry out the extensive preparations which were necessary for the further advance.

Renewed attacks by the Japanese on Port Arthur. Futile sortie of the Russian fleet. Makarow's death.

The main body of the Japanese fleet had left the immediate neighbourhood of Port Arthur after the combats on March 10; Makarow was thus free to move about with his fleet outside the harbour for some days. On March 22 the Japanese squadron reappeared before Port Arthur and, without any better results than before, made a torpedo attack on the outer harbour, and bombarded the town and harbour without, however, engaging in a fight with the Russian fleet. During the night of March 26-7, the Japanese made another, once more futile, attempt to block the entrance into the harbour by the sinking of ships.

The small results thus far obtained from all the enterprises against the Port Arthur fleet must have been the more galling to the Japanese, since at the end of March the enemy's ships *Retwisan* and *Pallada* were again ready for action. Just then chance relieved the Japanese for a long time of all anxiety for the safety of their maritime lines of communication.

The Japanese fleet had at the end of March withdrawn from the neighbourhood of Port Arthur. Not till the night of April 12-13 did torpedo-boats and a mining vessel reappear in the roadsteads of Port Arthur; they proceeded to lay out mines at various places. The next morning a fight of these

ships with Russian torpedo-boats returning from a reconnaissance caused Makarow to put to sea with the bulk of his fleet. Being induced to return by the appearance on the scene of the Japanese fleet, he was just on the point of forming his ships for battle, under the protection of the coast batteries, when his flagship, the *Petropawlowsk*, struck a mine and, probably owing to the explosion of an ammunition magazine, sank in an incredibly short time, Makarow and most of the crew going down with the ship. The Russian squadron returned to port in confusion, when also the battleship *Pobjeda* was seriously damaged by a mine.

Through these losses the relative strength of both forces was not only again displaced to the disadvantage of the Russians, but the latter also found themselves deprived of their commander, whose enterprising spirit had managed to rouse the dispirited and weakened squadron to renewed activity, which forced the Japanese into carrying out those tiresome enterprises against Port Arthur. After the Admiral's death the Russian squadron remained for a long time inactive.

The Japanese, who had watched these events in the roadstead from afar, renewed the bombardment on April 15, but with very little success, it is said.

Kamimura's squadron before Vladivostok.

News reached Japan at the beginning of March from which it was concluded that the Vladivostok squadron was intending another cruise in the northern maritime theatre of war.[1] With the

[1] P. 109.

object of preventing it, Admiral Kamimura was dispatched with one battleship and six cruisers against this second Russian naval base. He arrived before Vladivostok on the 6th, and at a very long range, and with very little success, bombarded the coast defences, the harbour, and town, without being able to entice thereby the inferior Russian cruiser detachment to come outside and fight. Kamimura returned again to the Straits of Korea after he had during the next few days searched the neighbouring bays and coves for Russian ships.

The Russian squadron was thus able to leave Vladivostok on April 23 once more with four cruisers and two torpedo-boats. The squadron arrived before Gensan on the 25th and sank two Japanese transports. On the following night it stopped the troopship *Kinshu Maru* in the neighbourhood of Schestakow harbour (on the Korean east coast, north of Gensan), and, as the company of Infantry on board would not surrender, sent her to the bottom of the sea by gun-fire and by a torpedo: seventy-three lives were lost, and amongst these were five officers; a portion of the men escaped in boats, and only a few of them were made prisoners, together with the crew of the ship.

On April 27 the squadron returned to Vladivostok, favoured by fog and without being found by Kamimura's pursuing ships. There was then a long lull in naval operations on this theatre of war as well.

V

OPERATIONS OF THE FIRST JAPANESE ARMY IN KOREA, AND THE RUSSIAN MEASURES TO THE END OF APRIL

The 1st Japanese Army concentrates south of An-tju.

UNDER cover of the five battalions and eight squadrons which had been pushed forward to the neighbourhood south of An-tju, the 1st Japanese Army was after its disembarkation to concentrate for the present south of An-tju, because Japanese Headquarters were still at that time counting to meet with resistance on the line of the Tschöng-tschön-kang.

Engineers who had been sent ahead had meanwhile, after the greatest exertions, repaired and rendered passable for vehicles the three main lines of advance passing through Sun-tschön, Suk-tschön, and Yöng-yu respectively. The coast road was found to be in such a deplorable state of repair that portions of it had to be completely reconstructed. When the Engineers began these works the cold was still intense. The soil resisted any work with the spade. These very extensive road-improvements had, therefore, to be carried out with the pickaxe.

When thaw set in on March 14, the roads, which had been improved with so much pains, became impassable, the vehicles sinking in the morass up to their axles, and the work having to be recommenced.

Kuroki's army began its advance from Pyöng-yang on An-tju on March 20. Daily progress was very slow on account of the miserable condition of the roads, as well as owing to the difficulties of supply caused by these bad roads and by the poverty of the country. Instead of covering daily 20 to 24 kilometres (12½ to 15 miles) as was intended, only 4 to 8 kilometres (2½ to 5 miles) were covered.

But it had meanwhile become quite clear that there would be no fighting in the neighbourhood of An-tju, since only Cossacks, who were estimated at about 1,500 to 2,000 strong, had been met with as far as Wi-tschu. It had been further ascertained that this body of Cavalry had already sent its battery from Sön-tschön to An-tung.

The army could, therefore, be quartered south of An-tju more widely than was originally intended. Quarters were apportioned to the 12th Division along the road from Sun-tschön to An-tju, to the Guard Division along the main road from Suk-tschön to An-tju, and to the 2nd Division the country within reach of the coast road. On April 4 the army was completely assembled south of the Tschöng-tschön-kang river line. Army Headquarters were in Tschi-nam-po since March 18.

While the army was still advancing with por-

tions on An-tju, a detachment of 5 battalions, 7 squadrons, 2 batteries, 1 Engineer company with bridging train, and half a bearer company had been sent ahead to push back the hostile cavalry reported to be in Pak-tschön, and seize the line Yöng-pyöng—Pak-tschön—Ka-san to cover the points where bridges were intended to be constructed. Small parties having established themselves on the right bank, the detachment crossed the river, at first without the batteries, on pontoon-rafts, on March 25, pushed back the enemy and reached the appointed line on March 27. The Russian Cavalry, while keeping constant touch with the Japanese, fell back on the line Un-san —Kui-söng—Sön-tschön.

Two Engineer companies of the 12th Division which had followed the detachment to the Tschöng-tschön-kang had meanwhile commenced the construction of the bridge. They succeeded in bridging the river with improvised material as early as March 27. Simultaneously the Engineers of the Guard Division had finished a bridge with prepared material over the river Tä-yöng-kang.

For the further advance of the 1st Japanese Army, which was to be directed towards the line Tschang-söng—Wi-tschu, two roads had to be considered in addition to the main road leading by Sön-tschön to Wi-tschu, namely, the roads Pak-tschön — Kui-söng — Sak-tschu and Yöng-pyöng—Tschang-söng.

Close reconnaissance had, contrary to former experience, established the fact that the road from Pak-tschön to Sak-tschu was at that time of the

year only passable for columns in single file, and for pack animals, and therefore unsuitable for large bodies of troops.

The Japanese 1st Army advances towards the Ya-lu by a single road.

But Army Headquarters had meanwhile learned that the Russian troops which had been pushed to the Ya-lu were concentrating on the northern bank opposite Wi-tschu, and that they were entrenching there. Thereupon General Kuroki determined to advance with his three divisions by the single road, An-tju—Sön-tschön—Wi-tschu, so as to avoid dissemination, and to move only by the mountain road to Tschang-söng with a weak flank guard, whose duty it was to cover the right flank of the army while it was crossing the numerous unbridged water-courses against the Cossack detachments reported to be in that neighbourhood. The flank guard, 3 battalions, 1 squadron, 2 batteries of the 12th Division, was to remain first near Yöng-pyöng, until the whole of the 1st Army had crossed the Tschöng-tschön-kang and Tä-yöng-kang, and then by rapid marches to reach the Ya-lu at Tschang-söng.

The advance of the whole army, restricted as it was to a single, neglected, muddy road, was bound to cause again considerable difficulties of supply owing to the poverty of the country to be traversed. Laden vehicles could not move even on this main road under the prevailing conditions of the weather. The Infantry at best could march but two abreast.

The supply vehicles were unable to keep up, and had stuck fast in the mud when the army was marching on An-tju. The supplies had,

therefore, to be brought up from Tschi-nam-po by pack-animals, but for the most part on the back of levies of Korean coolies. Yet even these numerous columns of carriers would not have sufficed to bring up sufficient supplies if they had marched day and night, so abominable was the condition of the main road to Wi-tschu. Arrangements had therefore to be made with the help of the sea route, which since the middle of March was free from ice, so that the troops would find in their advance supplies deposited at certain places. With this object it was arranged to land provisions at five previously selected points on the coast, whence magazines could be formed along the main road of advance. Places, affording of course facilities for landing, had been selected where good cross-roads led to the main road. The landing-places settled upon were: No-kang, at the mouth of the Tschöng-tschön-kang, for forming magazines at An-tju; a place south-west of Kwa-ksan, for magazines at Työng-tju and Sön-tschön; Bo-to, south of Kyön-san, and Li-ka-ho, south-west of Tschöl-san, for the magazine at Tschöng-kang-tscham; and Kui-am-po for the magazine at Tschang-tschök-kwan.

With the object of covering the establishment of these magazines, a new detachment of 3 battalions, 5 squadrons, 2 batteries, 1 Engineer company, half a field ambulance, under Major-General Asada, was detailed from the mixed force quartered at Pak-tschön and Ka-san, and pushed forward with orders also to reconnoitre as well as to repair the main road of advance.

Before this detachment began to move from Ka-san on April 1, Major-General Mischtschenko had advanced with six sotnias on Työng-tju on March 28, to ascertain the strength of the Japanese forces that had crossed over to the northern bank of the Tschöng-tschön-kang. The approach of a Japanese Infantry battalion from Ka-san caused him, however, to break off the dismounted action, in which he had been engaged for an hour and a half with his six sotnias against four Japanese squadrons and a few infantry. Without offering any further resistance the Cossack brigade then withdrew on Wi-tschu, and crossed there with its last portions to the northern bank of the Ya-lu on April 3.

Asada's Japanese Detachment, advancing from Ka-san, pushed back weak Cossack patrols and arrived with the bulk of the Cavalry on the Ya-lu, between Wi-tschu and Yo-nam-po, as early as April 4. The main body of the detachment reached Tschöng-kang-tscham on April 6, whence it continued its march to Wi-tschu on the 7th. On April 8 it arrived at that place, and near Yo-nam-po.

At the same rate as this detachment was advancing, progress was made with the formation of the above-mentioned magazines, along the line of advance of the 1st Army, and thus it was possible to substitute transport by sea for the extremely difficult transport by land. The conditions for bringing up supplies greatly improved as soon as it had become possible to land provisions at No-kang at the mouth of the

Tschöng-tschön-kang. But as soon as Asada's detachment had reached Yöng-tschön ample supplies could be brought up by sea to Li-ka-ho. The rearmost échelons of the army were then able to close up more rapidly.

The advance of the 1st Japanese Army from the neighbourhood of An-tju began on April 1, in the following order: 12th, Guard, 2nd Division. Each division marched in two échelons, each échelon was followed by half an ammunition and half a transport and supply column. The échelons followed each other at a day's march distance. Between the tail of the 12th and the head of the Guard Division a distance of two days', between the Guard and 2nd Division a distance of three days' marches was kept.

The first échelon of the 12th Division left An-tju on April 1, that of the Guard Division left Suk-tschön on April 7; the 2nd Division followed on April 11 from the neighbourhood south-west of An-tju.

The weather, especially heavy rains on April 8, made advance very difficult, even in the way it had been arranged. Thus on April 9 the bridge constructed over the Tä-yöng-kang by the Engineers of the Guard Division, was destroyed by storm and floods, the second échelon of the Guard Division being thereby split in two.

Sixteen pontoons sank. Repairs could not be taken in hand at once, as there was no [illegible] material in reserve. On the evening of the [illegible] day the bridge over the Tschö[illegible] built by the Engineers of the [illegible]

gave signs of giving way. The abutments were, owing to high floods, 60 to 70 centimetres (2 to 2⅓ feet) under water. The Engineers, aided by men from the Infantry and Army Service Corps of the 2nd Division, worked hard all night to save the bridge, and were often standing shoulder-deep in the ice-cold water. Fortunately they succeeded in preventing the bridge from being carried away by the floods, by steadying it with stones. As the floods subsided on the morning of April 10, it was possible to make the bridge over the Tschöng-tschön-kang safe again by 3 p.m. A body of Engineers then started at once with material for repairing the Tä-yöng-kang bridge. Towards 9 a.m. on April 11, that crossing was also fit for use again. Thanks to the long distances between the columns, the advance of the 1st Army was not delayed by these or similar obstacles. In spite of the exceedingly unfavourable condition of the roads, the foremost échelon of the 12th Division arrived in the neighbourhood of Wi-tschu already on April 14, six days after the arrival of Asada's detachment.

The 3rd East Siberian Rifle Brigade and the re-inforced Transbaikal Cossack Brigade are pushed forward to the Ya-lu.

On the Russian side, immediately after the surprise of the Port Arthur Fleet during the night of February 8-9, the Viceroy Alexejew pushed the 3rd East Siberian Rifle Brigade, under General Kaschtalinski, to An-tung on the lower Ya-lu, where the various regiments and batteries arrived by degrees. Soon after that brigade the reinforced Transbaikal Cossack Brigade under the command of Major-General Mischtschenko arrived there too. On February 17 Mischtschenko's Cavalry crossed

the ice of the Ya-lu river, and advanced to reconnoitre from Wi-tschu on An-tju. The guns and waggons of the 1st Transbaikal Cossack Battery proving too heavy in the difficult mountainous country of Korea, Major-General Mischtschenko sent the battery back to An-tung when it was barely at Sön-tschön. Advanced reconnoitring detachments had reached Ka-san on February 24, and gained touch on February 27 with the Cavalry of the Japanese Detachment that had been pushed forward on Pyöng-yang.

On February 28 the Cossack Brigade began to march back to the Ya-lu, after a brief dismounted action at Työng-tju, its last portion reaching the northern bank on April 3, as has been previously mentioned. The river at that time was still full of drift-ice.

Japanese Cavalry patrols had meanwhile entered Wi-tschu late in the evening of April 2, and fired from there on parties of Cossacks, who had as yet been unable to cross the main branch of the Ya-lu, and were thus still on the river islands.

The original grouping of the Russian forces is being changed.

Russian Headquarters had by this time abandoned the first grouping of their East Asiatic Forces. While it seems to have been originally intended to garrison strongly above all, the two unfinished fortresses, Vladivostok and Port Arthur, they began, as early as the end of February, after extensive Japanese landings had been clearly established at the Korean coast, to reinforce the group in Southern Manchuria by despatching thence the greater portion of the Vladivostok Forces.

The following field troops, however, were not

attached to the Manchurian Field Army: the 4th and 7th East Siberian Rifle Divisions with their Artillery, the 5th East Siberian Rifle Regiment, 1 sotnia of the 1st Werchneudinski Cossack Regiment, and the Kwan-tung Sapper Company, as it seemed imperative to leave these troops as a Kwan-tung group near Port Arthur; nor were the following attached: the 8th and 2nd East Siberian Rifle Divisions (less the 5th East Siberian Regiment of the latter) and their Artillery, 9 sotnias of Cossacks, 2 mountain batteries, and half the 1st Sapper Battalion, Russian Supreme Headquarters considering these latter forces, even at this moment, to be still necessary in the Ussuri district near Vladivostok.

A siege of Vladivostok was thought to be very likely. As a matter of fact the Japanese did provide two divisions for a siege of that place from the outset, namely the 7th and 8th, which for the present had been left at home.

It was determined, too, not to assemble the Russian Forces which were expected for the formation of a second line Army, first in the neighbourhood of Charbin, but to bring them up at once to the Manchurian Field Army.

Japan, having landed in Korea with an Army of at least three divisions, Russian Headquarters expected other landings to be effected shortly at Yinkou and on the coast of Southern Manchuria. By simple calculations the Russians had come to the approximately correct conclusion that the Japanese Transport Fleet could not at first ship much more than about 30,000 men at a time.

Russia had therefore now to face the question whether she should oppose these prospective landings of the Japanese. It can hardly be doubted that she would have been able to prevent the wearisome landings that were possible at a few places only on the Manchurian coast, if not permanently, then at any rate to harass them considerably, and to gain time thereby for a concentration further south; for, even south of Mukden and at Liao-yan, the Field Army was too far distant from those portions of the coast where a landing of the nearest Japanese naval échelons could be expected, to be in a position to reach the threatened points in time. But if the whole Manchurian Army of operations had been concentrated, say somewhere in the neighbourhood of Ta-schi-tschao, to where only the 9th and 1st East Siberian Rifle Divisions had been advanced to guard the coast and cover the concentration, it would have been in a position to render any landing of the Japanese, at least in the bay of Liao-tung, very difficult. It would then have been the task of the Kwan-tung group to protect the east coast of the Liao-tung and Kwan-tung peninsula. Probably the threat on the flank by the landing of the 1st Japanese Army in Korea prevented such a shifting of the forces more to the south, although Russian Headquarters could not have been unaware how little accessible the highlands are, through which that Army would have to pass, and what an extremely low rate of marching they caused already in the Chino-Japanese War of 1894. It would, moreover, have been possible to block

the roads leading from the Ya-lu over the passes with comparatively weak forces. The Russians, however, resolved not to oppose hostile landings on the south coast of Manchuria, but to concentrate in the neighbourhood of Liao-yan, and await the arrival of their troops from Europe before commencing any operations. The concentration of the Manchurian Army of operations at Liao-yan was to be covered by the two advanced divisions at Yin-kou and Ta-schi-tschao, and by the Eastern Detachment on the Ya-lu, which were to delay the enemy's advance. It was besides assumed that the transport of more Japanese forces could be delayed for some time by threatening the enemy's maritime lines of communication from Port Arthur and Vladivostok, which, as we shall see further on, proved to be correct. At the same time, it was considered necessary to organise a corps of observation against China and Mongolia.

Although a Japanese landing at Yin-kou presented many technical difficulties, the Russians still felt pretty certain that the Japanese would make strenuous efforts to land just here on the flank of the Russian railway connections with Port Arthur, all the more since from Yin-kou excellent roads lead to Kai-ping, Ta-schi-tschao, Liao-yan, and Mukden. In addition to the roads and railways, the large navigable water-courses of the Liao-ho, Hun-ho, and Tai-tsy-ho lead from Yin-kou right into the heart of Manchuria.

The landing itself would certainly have encountered very great difficulties. The depth of water close to the mouth of the Liao-ho is even

at high tide only 16 feet, so that the larger men-of-war could not have got within range of the coast. The fleet of transports would have had to rely thus on the support of the smaller warships only, while the attempt was made to land. But in consequence of the local measures of security adopted by the Russians at Yin-kou, even the smaller armed vessels would have had to sustain the fire of six 13·2 centimetre (5·28 inch) guns from a fort situated on the east side of the mouth of the Liao-ho as well as the fire from numerous field-guns. The river itself was defended by mines, which could be exploded from the forts. The narrow channel could be enfiladed by a battery of eight 13·2 centimetre (5·28 inch) guns, constructed close to the railway station.

The conditions for landing west of the mouth of the Liao-ho are extremely unfavourable too. As a landing here was therefore thought well-nigh impossible, this portion of the coast was not guarded by the Russians, who, moreover, had treated the Yin-kou to Kau-pan-tsze railway as the southern boundary of the non-neutral territory. The railway itself was guarded by Cavalry.

To watch this coast the Primorsk Dragoon Regiment had after a hurried mobilisation been moved by rail from Rasdolnoje in the Ussuri District to Kai-ping, and had occupied that town in the middle of February with one squadron, while another was guarding the coast thence to Yin-kou, and the remainder the coast south of Kai-ping as far as Helen Bay(" Helenen Bucht ").

With the object of opposing any attempt at

landing, it is said that in addition to the 9th East Siberian Rifle Division which numbered 12 battalions after the arrival of its four 3rd Battalions, and was stationed at Yin-kou and east of that place, another 8,000 men of the 1st East Siberian Rifle Division were held in readiness as early as the middle of April at Kai-ping, and 1,000 at Ta-schi-tschao. Trials in marching had proved the fact that these troops could oppose any attempt to land within seven hours. These forces were commanded by Major-General Gerngross, commander of the 1st East Siberian Rifle Division, while Major-General Kondratowitsch was commanding the troops of the foremost line. It is stated as a fact that, towards the end of April, numerous trains were held in readiness at the railway stations with steam up, so as to bring up troops at a moment's notice to any threatened point on the coast of the Gulf of Liao-tung. Frontier Guards watched the coast south of Hai-schan-tschai. As a matter of fact no landing was attempted by the Japanese, as they did not wish to run the risk of such a venture.

The 9th East Siberian Rifle Division at Yin-kou was at the same time ready to beat off, if necessary, the Chinese troops of General Ma, whose co-operation with the Japanese when landing at Yin-kou was thought probable at the beginning of the campaign.

As an additional precaution against these forces of General Ma, four more battalions and one battery were stationed at that time within the angle of the railway Sin-min-tun, Kau-pan-tsze, Yin-kou.

General Kuropatkin, who had meanwhile been

General Kuropatkin arrives on the theatre of war. His view of the situation.

appointed Commander-in-Chief of the Manchurian Army, arrived in Liao-yan on March 27, after a rapid journey.

Although, as far as numbers go, he could have opposed offensively, in conjunction with the Kwantung group, any likely attempts of the enemy to land—for in the middle of April he had enough men of the Manchurian Army of operation assembled south of Liao-yan—General Kuropatkin had nevertheless resolved to assemble the reinforcements, which were coming up, in entrenched positions at Liao-yan, and not to commence operations until he had obtained superiority in numbers. Various remarks of the Russian Commander-in-Chief had gone abroad as early as February, and had not remained unknown to the Japanese, that no decisive blows were to be expected from the Manchurian Army before the middle of August. An offensive, too, against the 1st Japanese Army, should it continue to advance in the direction of Liao-yan after it had forced the Ya-lu, was disapproved by Russian Headquarters. To advance through the mountainous country between Liao-yan and the Ya-lu, and above all to debouch from it in the face of the 1st Japanese Army, was considered such a difficult undertaking, that it seemed rather advisable to leave to the Japanese the assumption of the offensive through these highlands. Moreover, the Russian Army had no mountain artillery, and no pack-animals; the Russian soldiers, too, being born and bred in the plains, were not accustomed to mountainous districts. It was therefore in-

tended to await the attack of the 1st Japanese Army in the neighbourhood of Liao-yan, and merely to delay Kuroki's Army on the Ya-lu. The Russians relied upon the inability of the Japanese to assume the offensive over the mountains before the end of June, the time when, as a rule, the rainy season sets in. It was generally accepted that during the rainy period all large operations would be impossible. Russian Headquarters thought that up to that time the concentration of the Manchurian Army of operation could be completed unmolested. The Staff was of opinion, too, that prior to an advance of the 1st Japanese Army across the Ya-lu, a landing would be effected at Yin-kou, or on the southern Manchurian coast, between the mouth of the Ya-lu and Da-gu-schan, or further west, as the advanced Russian Eastern Detachment, thus threatened in flank and rear, would be obliged to retreat by Fön-huan-tschön and surrender to the 1st Japanese Army the crossings of the Ya-lu in this way automatically. It was, however, doubted whether the Japanese would advance immediately after landing, as they would not have the necessary transport ready for bringing up supplies in that poor country. It was thought, therefore, that their next object after landing west of the mouth of the Ya-lu, and after gaining the passages of that river, would be the isolation of Port Arthur and, above all, the creation of a base. For, thus far, all measures of the Japanese had shown that the creation of a base was considered necessary, as a matter of principle, before any further advance

was made. Yin-kou was looked upon as the most suitable point for such a base; and a landing at the mouth of the Liao-ho was, therefore, what chiefly occupied the mind of the Russians.

While it seems that at the end of April there was still the intention of opposing a hostile landing at Yin-kou, there is no doubt that this idea was soon afterwards finally dropped. It was then considered expedient to allow all the Japanese forces to enter Manchuria first, to avoid any decisive engagement with them until superiority of numbers was established, and then to end the whole campaign by a single great and decisive battle.

The East Siberian Rifle Divisions, which had their garrison in the north of the Maritime Province, and the two European Infantry brigades with their Artillery, which had also been quartered there, were brought up by rail in the following order: 1st, 5th, 6th Rifle Divisions, Infantry brigades.

Disposition of the Russian forces at the end of April.

General Kuropatkin had at the end of April, within the space Mukden—Yin-kou—Kai-ping, at his disposal, including the 1st Siberian Infantry Division, 68 battalions, 48 sotnias and squadrons, and 25 batteries, thus roundly 70,000 men.[1] The Eastern Detachment had its main body on the Ya-lu, and portions along the stretch of coast from Da-gu-schan to the mouth of the Ya-lu. Its total strength was 24 battalions, 22 sotnias, and 10 batteries. The 23rd East Siberian Rifle Regi-

Sketch 4.

[1] Portions of the 1st Siberian Infantry Division were still in Northern Manchuria.

ment, and the 4th Batteries of the 3rd and 6th East Siberian Artillery Brigades were still on the march to the Ya-lu when the 1st Japanese Army was crossing that river. Appendix VII.

The Ussuri group had of field troops, without counting the fortress troops, 21 battalions, 9 sotnias, and 9 batteries; the Kwan-tung group had, exclusive of fortress troops, 27 battalions, 1 sotnia, and 7 batteries.

It is plain from the Appendix, where the composition of the Eastern Detachment is given, that this detachment had meanwhile, during April, been reinforced by the 6th East Siberian Rifle Division and its Artillery. But these reinforcements arrived only by degrees.

After the return, on April 3, of Major-General Mischtschenko's Transbaikal Cossack Brigade from Korea, Major-General Kaschtalinski had at his disposal on the right bank of the Ya-lu, at first only the 9th, 10th, 11th, and 12th East Siberian Rifle Regiments, 1 machine gun company, the 1st East Siberian Mountain Battery, 3 batteries of the 3rd East Siberian Rifle Artillery Brigade, and the reinforced Transbaikal Cossack Brigade, to which belonged the 1st Tschitinsk, 1st Argunsk, 1st Werchneudinsk, and 1st Ussuri Cossack Regiments, and the 1st Transbaikal Cossack Battery —thus in all 8 battalions, 1 machine gun company, 22 sotnias, and 38 guns, 6 of which were Horse Artillery guns, and 8 mountain guns.

Of these, the 9th, one battalion of the 10th, and the 12th East Siberian Rifle Regiment, the machine gun company, and three batteries of the 3rd East Sketches 3 and 5.

Siberian Rifle Artillery Brigade were at the beginning of April, in the section of ground, San-do-gu—An-tung—Tiu-ren-tschin, when Asada's Japanese Detachment was approaching Wi-tschu. The 11th East Siberian Rifle Regiment was with the general reserve at Ten-sy, and the 2nd Battalion of the 10th East Siberian Rifle Regiment at Fön-huan-tschön.

This position was covered by the detachments of mounted scouts from the 9th, 10th, 11th, and 12th Regiments, who occupied the right bank of the Ya-lu between Nian-tschan and Am-bi-ho.

The reinforced Transbaikal Cossack Brigade was distributed on both wings, and was stationed as follows:

On the right at Örr-da-gou the Brigade Staff, 4 sotnias of 1st Tschitinsk Regiment, and 1st Transbaikal Cossack Battery; at Ta-tun-gou and Ko-wan-gou on the coast a sotnia each of the same regiment.

The 1st Werchneudinsk Cossack Regiment watched the coast-line to the right from Ta-tun-gou to Pi-tsze-wo.

The Cavalry of the left wing was commanded by Colonel Truchin, commander of the 1st Argunsk Transbaikal Cossack Regiment. The 1st Argunsk Regiment was at Tsiu-liu-an; the Ussuri Regiment was on outpost on the bank of the Ya-lu, between Am-bi-ho and Siao-pu-si-ho, its headquarters and two sotnias being at Tschan-do-ho-kou.

Between April 1 and 3, the 22nd and 24th East Siberian Rifle Regiments of the 6th East Siberian Rifle Division as well as the 2nd and 3rd Batteries of

the 6th East Siberian Artillery Brigade had begun to move from Liao-yan on Fön-huan-tschön.

The position on the Ya-lu.

It can be seen from this distribution of the Eastern Detachment that the whole of Mischtschenko's Cavalry as well as the detachments of mounted scouts, who to some extent had to make good the deficiency in divisional Cavalry, had left the southern bank of the Ya-lu in the hands of the enemy since April 3. On the northern bank of this powerful obstacle, which was nowhere bridged, and further to the west, all the forces of the Eastern Detachment were facing the approaching 1st Japanese Army during the whole of April, in cordon-like fashion, between Da-gu-schan and Siao-pu-si-ho, a distance of about 170 kilometres (106¼ miles). The withdrawal of the Russian reconnoitring detachments over the river gave the 1st Japanese Army an extraordinary advantage in all they did, as the Ya-lu completely veiled them.

Sketches 1 and 3.

Near Mau-örr-schan the Ya-lu, which in its upper course is only an insignificant mountain brook, is already 160 metres (178 yards) broad and ·9 to 1·8 metres (3 to 6 feet) deep. The fords on this stretch are always passable except when the river is in flood. Between Mau-örr-schan and Wai-tza-gou the river is 160 to 320 metres (178 to 356 yards) broad, and in some places 3·6 metres (12 feet) deep. The river here is no longer fordable at any time of the year. Junks can go up as far as Wai-tza-gou, but to Mau-örr-schan only smaller craft can go. The hills which accompany the river on both banks are mostly steep and

wooded, and rise to an average height of 300 metres (1,000 feet).

The portion of the Ya-lu between Wai-tza-gou, Siao-pu-si-ho, and Gu-lu-tzi is of a mountainous, often ravine-like character, too. The river's breadth varies between 300 and 500 metres (333 and 555 yards), and its depth between 2·5 and 3·5 metres (8 and 12 feet). There are fords about 1 metre (3⅓ feet) deep at Tschan-do-ho-kou and Gu-lu-tzi.

Sketch 5. Below Gu-lu-tzi the river divides itself into several branches, thus forming in its lower course numerous flat and sometimes dune-like islands; of these, only the islands of Ku-ri-to, O-se-ki-to, and Sa-ma-lin-da are covered with a few plants and trees, and even these are only found in the central portions of the islands and in the neighbourhood of the villages, of the same name as the islands. Their banks and tongue-like extremities are white sandy flats. The other islands, which are loamy and sandy too, are covered, like the banks of the river, with patches of scrubs and reeds, and are almost perfect plains without any cover.

The northern bank of the Ya-lu commands the southern bank generally. Where the heights on the right bank are more retired, as between the junctions of the Pu-yi-ho and Am-bi-ho with the Ya-lu, the villages of Gu-lu-tzi and Am-bi-ho will be found, and opposite the latter, on the left bank, Schi-gu-pu. The current at this place is about 1·8 metres (6 feet) per second. There are fords in this neighbourhood,

too, when the water is low. Below Schi-gu-pu the river valley widens considerably, on the average from 5 to 8 kilometres (3 to 5 miles), including the islands; only north of Wi-tschu it contracts once more to 2 kilometres (1¼ mile). The main branch of the Ya-lu, which is at no time of the year fordable between Schi-gu-pu and Wi-tschu, attains here a width of 200 to 350 metres (220 to 385 yards), and a depth up to 8 metres (26 feet). The minor branches, which are fordable here and there, have a breadth varying from 80 to 350 metres (88 to 385 yards). Some portions of the Ya-lu below Wi-tschu are 700 metres (770 yards) wide, and south of its junction with the Po-ma-hua it is 2 kilometres (1¼ mile) wide. The tides can be noticed as high up as An-tung.

The heights which the main body of the Eastern Detachment occupied between An-tung and Tiu-ren-tschin fall steeply to the Ya-lu and Ei-ho. The chief defect of the Russian position was that, owing to the threat by the Japanese to land west of the mouth of the Ya-lu, and to cross that river at and below An-tung, the commanding heights of the Hu-san did not form part of the defensive position because they were separated from the main position by the deep valley of the Ei-ho. On account of these hostile demonstrations, which in every defence of a river are extremely difficult to recognise as such, the Russians thought it necessary to keep strong forces behind their right wing.

The very difficult and much-fissured highlands

of Hu-san, which, although showing only elevations up to 500 metres (1,660 feet), bear the character of secondary mountain ranges, and are more, it is said, like the Harz mountains, accompany the right bank of the Ya-lu between Am-bi-ho and Syn-dia-gou for a distance of 14 kilometres (9 miles), and approach close to the river with a steep drop towards it. The southernmost extremity of these heights, the Tiger Hill, upon which only a Russian Detachment of trained scouts had established itself, projects at Syn-dia-gou, like a fort, into the angle formed by the junction of the Ei-ho and Ya-lu, thus barring any view from the Russian position at Tiu-ren-tschin into the upper valley of the Ya-lu river, and into the upper portions of O-se-ki-to, as well as into Ku-ri-to island, and thereby favouring the crossing of the river above Syn-dia-gou by an assailant who is in possession of it.

The Ei-ho, flowing past the front of the Russian left wing, which had been prolonged to Po-tö-tyn-sa and Tschin-gou at the end of April, when it was attacked by the Japanese, forms at its lower course three shallow branches. These had been fordable in the autumn of 1894, almost anywhere. At the end of April 1904, the Ei-ho, as was known to the Japanese, had only four fords, of which those at Po-tö-tyn-sa, Tiu-ren-tschin, and north-east of Tiu-ren-tschin were the more important ones. The width of the Ei-ho is 150 metres (166 yards). Its left branch is no obstacle. The right bank commands the left. Connection between the Am-bi-ho and Ei-ho valleys is formed by a

difficult mountain path, joining the villages Hun-si-las and Li-sa-wen.

The range on the left side of the Ya-lu river, opposite the Hu-san heights, is 100 to 200 metres (330 to 660 feet) high; it approaches close to the river at Schi-gu-pu and Wi-tschu, and north and west of the latter place drops into the river-bed as a perpendicular wall about 60 metres (200 feet) high. North-east of Wi-tschu this range is crossed by the Tu-ten-ho, which is about 50 metres (55 yards) broad, and joins the Ya-lu at Ku-ri-to island, thus obliging the Japanese to bridge it. Covered by this range, the 1st Japanese Army was able to concentrate afterwards in the depressions south and east of Wi-tschu, unobserved and beyond range of the enemy's field-guns, and to make quietly all the necessary and extensive preparations for crossing the river.

The heights on the right bank of the Ya-lu and Ei-ho rivers, between the Ei-ho and the tributary U-da-gou, joining the Ya-lu above Ta-di-sa island, which approach the Ya-lu and Ei-ho rivers to within 500 to 1,000 metres (550 to 1,100 yards) and formed the Russian main position, have also deep and steep rocky gorges; although they are only 80 to 200 metres (265 to 660 feet) high. This kind of country did not facilitate the deployment of large masses of Artillery. The roads leading from the north-west into the valley of the Ya-lu could be seen into from the Korean bank.

Below the junction of the U-da-gou with the Ya-lu, the latter's right bank gradually descends

and merges into the plain at A-mi-san. Thence, as far as east of Da-gu-schan the sea coast is marshy and swampy, and, therefore, unfavourable for landing. The Korean bank, which is undulating as far as Yo-nam-po, grows flat and sandy below that place. At Yo-nam-po even large ships can land.

The island of Man-do and Schan-dun-do as well as numerous bars, face the mouth of the Ya-lu. The eastern branch of its mouth can only be navigated by small junks, the western branch is at many places only 3·5 metres (12 feet) deep. At any rate, Japanese gunboats with a draught of 3 metres (10 feet) were able to enter the river. There are three anchorages south of Ta-tun-gou; larger vessels which cannot cross the bar even at high tide can here lighten ship.

All reconnaissance fails, owing to the withdrawal of the Transbaikal Cossack Brigade behind the river.

As the Transbaikal Cossack Brigade must have known what an enormous obstacle to reconnaissance the river barrier of the Ya-lu was forming, it is difficult to understand, even if it was ordered to avoid any serious collision with the enemy, why the whole Brigade retired to the north bank of the Ya-lu on April 3, instead of giving way with its main body south of the river in a north-easterly direction, thereby flanking the advance of the 1st Japanese Army, in such a way as to be able to reconnoitre its right flank and rear, while it was concentrating on the Ya-lu, and thus to carry out the most important task of every body of Cavalry. To furnish the Cossack Brigade with all the supplies it wanted would not have been a difficulty impossible to over-

come. The consequence of this early retirement over the Ya-lu was that the few Cossack patrols and detachments of scouts, which were pushed out afterwards in a southerly direction, were unable to get through anywhere, that the advance and concentration of the 1st Japanese Army could proceed unknown to the Russians, and that the Eastern Detachment mostly remained ignorant of the enemy's direction of the attack until the morning of May 1. Even the strength of Asada's advanced Detachment at Wi-tschu, which had reached the Ya-lu with its patrols during the night April 2-3, with its Cavalry Regiment on the 4th and with its main body on April 8, thus fully three weeks in advance of the action on the Ya-lu, was not established by Russian patrols, but by Korean spies.

But, even if the Russians had recognised that the foremost échelon of the Japanese Army, which was following Asada's Detachment at a great distance, was fully five days' march south of Wi-tschu, the Eastern Detachment would scarcely have been in a position, after once the ice had started on the Ya-lu River, to take advantage of the isolation of Asada's Detachment to gain an initial success, which is always highly desirable, as they had not the necessary means for crossing.

Japanese outposts and reconnoitring patrols had been ascertained at the Russian settlement of Yo-nam-po as early as April 5, so also on the island of Ta-di-sa, to the west of Wi-tschu, and in Wi-tschu itself, as well as on the island of Ma-tu-zeo, where a skirmish with the detachment of scouts from the 12th Regiment took place.

Kuropatkin's interchange of wires with the Eastern Detachment.

On that day General Kuropatkin sent the following instructions to Major-General Kaschtalinski, Commander of the Eastern Detachment, who at that time had at his disposal on the Ya-lu only the 3rd East Siberian Rifle Division, without the 3rd Battalions of its regiments, and Mischtschenko's Cossacks: "Take the most energetic measures to get in touch with the enemy, organise reconnaissances across the river. Order small enterprises against the enemy and alarm him. Pay high sums to native spies. Report to me at least twice daily, even if nothing has happened. Repair the road to Fön-huan-tschön. Carefully think out all orders for defence and for retreat, so that no trophies may fall into the hands of the enemy. Get into communication with Madritow." [1]

From this telegram as well as from the subsequent directions, orders, instructions, inquiries, and remarks, which will be here briefly referred to, and which almost daily reached the Eastern Detachment in large numbers from Army Headquarters at Liao-yan, a clear idea can be formed of how much the leaders, who were in touch with the enemy, must have been influenced in their resolutions by Headquarters. This constant interference with the authority of subordinates even right up to commanders of divisions and corps, which is brought to light here, and which did not mind to order about even individual battalions, batteries, and sections of batteries, was the cause, as can be gathered from the next few paragraphs, that the leaders of the Eastern Detachment did no

[1] P. 151.

longer venture to order the smallest alteration on their own initiative; but, by reason of this tutelage from Liao-yan, always asked permission first for such by telegraph from Army Headquarters. No wonder that in this way also the self-reliance and initiative of the inferior grades as well as of the private soldiers were reduced to a very low level, especially when, as in the Russian Army, there is in itself little inclination to act spontaneously. This could not be otherwise than fatally felt throughout the campaign.

Thus on April 7 Army Headquarters gave permission to close the navigation on the Ya-lu at the request of Major-General Kaschtalinski, who thought it was not safe for the Eastern Detachment, particularly at night, that numerous junks and boats should ply on the river after the ice had drifted away. Army Headquarters further permitted the removal of about 1000 inhabitants from the island of Kia-sin-tsa, in front of the Russian position; Headquarters were asked to permit this as a measure of security, and, when granting this permission, Headquarters recommended at the same time to employ these people in repairing roads.

Small encounters on the Ya-lu islands.

Reconnaissances on both sides led, since April 7, almost daily to small encounters on the Ya-lu river and its islands. The Russians say that they had learnt, as early as April 10, of the extension in a northerly direction beyond Wi-tschu of the Japanese troops that had been reported along the Ya-lu, between the Po-ma-hua and Wi-tschu. Further intelligence indicated that the enemy was busy constructing redoubts and gun-pits on the

Sketches 3 and 5.

heights south of Wi-tschu, and that he was trying to hide these works by screens. The Russians further maintain that the Japanese had dressed in Korean garb while carrying out these entrenchments. Reports came in from the left wing that Japanese Cavalry patrols had been seen at Gu-lu-tzi.

Detachments of trained scouts, which had tried to cross the lower Ya-lu in boats, had everywhere met with the enemy's outposts. The Japanese say that on April 12 they found, in the pocket of an officer belonging to the detachment of trained scouts of the 12th Regiment, a written order directing this detachment to cross the river, break through the Japanese outposts, and reconnoitre south of Wi-tschu. At that time, however, there was no longer any chance for Russian patrols to get through; their reconnaissance was restricted to the islands.

During April 13 the concentration of strong Japanese forces between Yo-nam-po and Wi-tschu was confirmed by further intelligence, and the entrance of Japanese ships in the mouth of the Ya-lu was reported. At the same time it seemed also most likely that Japanese forces were advancing north of Gu-lu-tzi.

The 1st Japanese Army deploys at Wi-tschu. The 1st échelon of the 2nd Japanese Army embarks.

Meanwhile the foremost échelon of the 12th Division, marching at the head of the 1st Japanese Army, had approached the Ya-lu to within a day's march. The Army was obliged to debouch from the hills, south-east of Wi-tschu, on a single road. That road, where it crosses the last range about 8 kilometres (5 miles) south-east of Wi-tschu, could be overlooked from the other bank of the Ya-lu.

But as Major-General Asada's advanced detachment had very cleverly constructed screens of trees, bushes, and gaoljan for some distance along that road, the approach and deployment of the Army were completely and successfully hidden from the enemy's view. On April 20 the whole of the 1st Japanese Army had arrived at Wi-tschu. Appendix VIII

Owing to the condition of the roads, which was bad beyond description, and owing to the enormous difficulties of supply, it had taken the Army one month to cover the 200 kilometres (125 miles) from Pyöng-yang to the Ya-lu, and this in spite of the most perfect utilisation of every available means, as well as in spite of the utmost exertions of man and beast.

At this time the line of communication which started from Li-ka-ho, where meanwhile a regiment of heavy field howitzers had been landed unknown to the enemy, was already in full working order. As fine weather had set in, the comparatively short road to Li-ka-ho had become firm, so that now all technical troops could be moved up for preparing the crossing over the Ya-lu.

The line of communication by Pyöng-yang, which had been used hitherto, was, however, kept open as well, in case retreat should become necessary. The General Officer commanding the Lines of Communication continued in his efforts to improve the roads and telegraph lines constructed by the troops during their advance.

A Japanese flotilla of 2 gunboats, 2 torpedo-boats, and 2 to 4 armed steamers had appeared at the mouth of the Ya-lu as early as the middle

of April. Under their protection the transfer could be effected of all the bridging material that had been shipped from Japan.

As soon as the Japanese had felt sure of the command of the sea the first échelon of the 2nd Army, which was eventually to land on the Liao-tung peninsula, was embarked. This first echelon was composed of the combatant portions of the 1st, 3rd, and 4th Divisions, and of the 1st Artillery Brigade.[1] It arrived in thirty transports at Tschi-nam-po on April 16, and there waited for the issue of the struggles of Kuroki's Army on the Ya-lu.[2] Admiral Togo's Fleet occupied the attention of the Port Arthur Fleet and covered the Japanese transports, Kamimura's Fleet watching at the same time the Vladivostok cruisers.

On April 30, when the deployment was complete, the 12th Division was south-east of Wi-ju, the Guard Division south, and the 2nd Division south-west of that place. The detachment which had been pushed forward, with the object of covering the establishment of magazines along the road to Wi-ju, was dissolved, and its component parts rejoined their units.

Each division had to secure its own section of ground. Their outposts were close to the southern bank of the river, and were covered from the enemy's view by screens where the ground afforded no cover. Most stringent measures had been adopted to keep the concentration of the

[1] [illegible] Brigade also formed part of [illegible]

[2] [illegible] 2nd Army was March 8; its [illegible]

army at Wi-tschu secret. No one was allowed to show himself at daytime on the heights that gave the cover. At those places where traffic over the heights could not be avoided during the later stages of the preparations, screens of gaoljan and of small trees were erected.

The Russians, on the other hand, took no precautions whatever to hide their own measures from the Japanese. Everywhere they showed an absolute unconcern. Crowds of Russian troops could be seen on the heights opposite Wi-tschu, horses were brought down to the Ei-ho to water, and the mounted troops exercised their horses on the sandy flats in the river valley.

At the same time, when the Army arrived at Wi-tschu, the 3 battalions, 1 squadron, and 2 batteries of the right flank guard of the 12th Division reached Tschang-söng. Yo-nam-po, on the left wing, where the Engineers were preparing bridging material, was occupied by a few Infantry. The Japanese outposts had been occupying the left bank of the Ya-lu for a distance of 125 kilometres (78 miles), between Pyök-tong and Yo-nam-po, since April 20. This great extent of front and the demonstrations at Siao-pu-si-ho and Tschan-do-ho-kou, as well as at the mouth of the Ya-lu at Yo-nam-po, were meant to induce the weak Eastern Detachment to a still greater dissemination of its forces on the northern bank of the Ya-lu, and to divert its attention from the preparations for crossing the river at and above Wi-tschu.

Reconnaissances of the Ya-lu river and of the

enemy's positions were started immediately after the arrival of Major-General Asada's Cavalry at Wi-tschu. An extensive system of espionage considerably aided these reconnaissances. It was then soon found out that the river-bed had materially changed since 1894, and that the maps which had been made at that time were no longer reliable. The islands of Ku-ri-to, O-se-ki-to, and Sa-ma-lin-da were occupied by Russian outposts, who cast a light on the river the moment any Japanese reconnoitring patrols tried to pass in boats between the islands at night. For this purpose the Russians used long poles, at the end of which bundles of dry grass and gaoljan were ignited. Reconnaissances had, therefore, to be confined, for the present, to the near branch of the river. Only above Am-bi-ho had Infantry patrols crossed the river in the early part of April. It goes without saying that the enemy's position was constantly kept under observation from a telescope station on the high ground of Wi-tschu.

Russian measures in the second half of April.

On April 13, at the moment when the foremost échelon of the 1st Japanese Army was approaching Wi-tschu, the Russian Eastern Detachment was occupying a cordon-like position about 170 kilometres (106 miles) long, extending along the coast from Da-gu-schan to the mouth of the Ya-lu, and thence along the river's right bank to Siao-pu-si-ho. Mischtschenko's Detachment continued to watch the coast on the right, from Pi-tsze-wo to the mouth of the Ya-lu. The main body of the Eastern Detachment was within the

triangle, An-tung, Tiu-ren-tschin, Ten-sy. Colonel Truchin's Cavalry was disposed on the left as follows: the 1st Argunsk Regiment in Tsiu-liu-an; the Ussuri Regiment along the Ya-lu, with a sotnia each at Am-bi-ho, Gu-lu-tzi and Siao-pu-si-ho, and 2 sotnias at Tchan-do-ho-kou. Sketches 3 and 5

The 6th sotnia of the Ussuri Regiment was attached to Lieutenant-Colonel Madritow's flying column, which was assembling at Chuan-schen-sian (Wai-tsön-sian); attached to it, besides this sotnia, were the detachments of mounted scouts of the 1st and 15th East Siberian Rifle Regiment, as well as the sotnia of Ossetin Volunteers which were coming up. The formation of Madritow's Detachment, which was to reconnoitre the roads leading from Korea to the middle course of the Ya-lu, and to raid the lines of communication of Kuroki's army in Korea, had been ordered by the then Commander-in-Chief, Lieutenant-General Linewitsch, as early as the beginning of March. As Lieutenant-Colonel Madritow knew this country intimately, through having repeatedly travelled over it from 1900 to 1904, he was given complete freedom of action.

In consequence of the destruction of Makarow's flagship, *Petropawlowsk*, and of the death of this energetic Admiral on April 13,[1] General Kuropatkin was induced to send the following directions by telegraph to the Commander of the Eastern Detachment on April 14: "We must be prepared for a landing of the Japanese on the right bank of the Ya-lu to-night or to-morrow. Their fleet is

[1] P. 116.

blockading Port Arthur. In view of the arrival of the 6th Division at Fön-huan-tschön, it seems necessary to move all troops of your Division closer to the positions, and to push the portions of the 6th Division as they arrive rapidly to the Ya-lu, to join the general reserve at Ten-sy, or to any other point. It seems to me desirable also to move Major-General Mischtschenko from Örr-da-gou closer to the coast, and to give him 1 battalion and 2 guns in support for use along the coast."

Between April 13 and 18 the enemy's situation appeared to be as follows: Japanese torpedo-boats had been sighted at the mouth of the Ya-lu, and the arrival of numerous vessels at Yo-nam-po was reported on April 15. It was thought that about 14 kilometres (9 miles) below Wi-tschu and 7 kilometres (4½ miles) south of Kia-sin-tsa island preparations for crossing the river, such as collections of boats, junks, and timber, could be noticed. It became, moreover, known that more Japanese troops of all arms had arrived in the neighbourhood of Wi-tschu. It was said that Japanese detachments had appeared on April 16 on the left wing, too, opposite Tschan-do-ho-kou.

On April 18 news came in saying that Japanese forces had been seen to arrive opposite the extreme left wing at Siao-pu-si-ho, and were constructing entrenchments 15 kilometres (9½ miles) south of that place. This caused Major-General Kaschtalinski to ask permission from Army Headquarters to move up the mountain battery from Fön-huan-tschön to Tschan-do-ho-kou. The battery, however, did not start before April 21, when it was escorted

by a company of the 2nd Battalion of the 10th Rifle Regiment, which was quartered at Fön-huan-tschön.

The Commander of the Eastern Detachment received instructions from the Commander-in-Chief on April 18 directing him to make use of every means of the locality for rendering the enemy's crossing over the Ya-lu, as well as his further progress over the Fyn-siao-lin Pass, as difficult as possible, and to ascertain the strength, composition, and direction of the Japanese Army that was approaching, and which from intelligence received was stated to consist of the Guards' 2nd and 12th Divisions and possibly of the 6th Division as well. He was further told that the landing of the 1st and 3rd Divisions, which had already left Japan in transports, was to be expected at the mouth of the Ya-lu.

The intelligence received on April 19 confirmed the reports about the concentration of large hostile forces at Wi-tschu, and their extension in a northerly direction. Japanese men-of-war had seized Chinese boats laden with wood off Po-tin-sa. It was ascertained that entrenchments were being made opposite Gu-lu-tzi, and the Korean people spread the news of an advance of a Japanese detachment on Tscho-san. Another report pretended to know of a Japanese landing at Da-gu-schan. In consequence of these reports the march of the 21st East Siberian Rifle Regiment and of the 1st Battery of the 6th East Siberian Rifle Artillery Brigade, who, after having reached Hai-tschön by rail on April 13, had started thence for

Da-gu-schan, was accelerated to such an extent that they arrived there as early as April 21. It took these troops, therefore, only nine days to cover the 140 kilometres (87·5 miles) from Hai-tschön to Da-gu-schan.

Sketches 1 and 3.

A telegram arriving at this time from General Kuropatkin directed the Commander of the Eastern Detachment to initiate a reconnaissance, with the object of ascertaining the whereabouts of the right wing of the Japanese on the Ya-lu, their strength, and disposition. It also stated that it was the wish of the Commander-in-Chief that Colonel Truchin's Cossacks should remain on the left bank of the Ya-lu, and, if pressed, give way on the left bank in a north-easterly direction on Mau-örr-schan, and that connection was to be sought with Madritow.

The latter had meanwhile, on April 15, crossed the Ya-lu in junks at Wai-tza-gou with the detachment of mounted scouts of the 15th East Siberian Rifle Regiment and the 6th sotnia of the 1st Ussuri Regiment, and had entered Tscho-san on the 16th, when its Korean garrison of 250 men surrendered. On April 18 the detachment of mounted scouts of the 1st East Siberian Regiment arrived here too. Patrols, which had been pushed out towards Pyök-tong and Wi-wön, had seen nothing of the enemy. Natives, however, maintained that Tschang-söng was occupied by 2,000 Japanese. Japanese were also said to have entered Tschang-tschin. A reconnoitring party of the 1st Nertschinsk Regiment, which was at this time in Ki-tschön and had heard of this report too, there-

upon sent a patrol to Tschang-tschin. In north-eastern Korea the detachment of mounted scouts of the 7th East Siberian Rifle Regiment reached Mu-san on April 19.

On the rumour of a Japanese advance in force on Kang-kö Lieutenant-Colonel Madritow had meanwhile pushed out patrols to that place and to Ki-tschön. The patrol sent to Kang-kö reported, on April 21, that Wi-wön was not occupied by the enemy, but that 3,000 Japanese were said to be about Kang-kö, and that the inhabitants were busy improving roads and bridges, as well as collecting supplies by order of the Japanese. At that time Madritow's party had not yet succeeded in establishing the connection with the Cavalry of the left wing of the Eastern Detachment, which was being sought by way of Siao-pu-si-ho.

The following additional intelligence of the enemy's forces opposite the Russian front on the Ya-lu had been received up to April 21: South of the Po-ma-hua River only weak hostile parties had been established; but it was said that troops were still being landed in the neighbourhood of Yo-nam-po. It was alleged that the Japanese were collecting vessels there, and bringing up pontoons. Boats, too, it was said, were being constructed there. According to intelligence received, there were more than two brigades of the enemy in the neighbourhood of Wi-tschu, and at least one regiment opposite Am-bi-ho. Hostile detachments had also been established still more to the north, as far as the neighbourhood of Siao-pu-si-ho. It was rumoured that Tschang-söng was occupied too.

Of the portions of the 6th East Siberian Rifle Division, which was marching to join the Eastern Detachment, the 22nd East Siberian Rifle Regiment and a battery of the 6th East Siberian Rifle Artillery Brigade had meanwhile reached the Ya-lu on April 16. At the same time the three companies of the 2nd Battalion of the 10th Rifle Regiment in Fön-huan-tschön had also been moved up. The 24th Rifle Regiment, which could have reached the Ya-lu at the latest on the 18th, had been left behind in Tan-san-tschyn-dsa, half-way between Fön-huan-tschön and An-tung, to mend the roads. *En route* at this time were the 3rd Battalions of the 9th and 10th East Siberian Rifle Regiment, which had started from Liao-yan between April 10 and 12, and the 3rd Battalions of the 11th and 12th Rifle Regiments, which had left Liao-yan between April 14 and 16.

Lieutenant-General Sassulitsch assumes command on the Ya-lu.

The command of the Russian forces on the Ya-lu, and of those on the way to the Ya-lu, had meanwhile been given to Lieutenant-General Sassulitsch. The late Commander of the 2nd Siberian Army Corps had therefore in his command two divisions which did not belong to his corps, and these divisions again belonged to different corps.

After his arrival on April 22 Lieutenant-General Sassulitsch *disposed the Eastern Detachment* as follows:

Sketches 3 and 5.

On the *right* Major-General Mischtschenko retained for watching the sea-coast, between Pi-tsze-wo and the mouth of the Ya-lu, the 1st Werchneudinsk Transbaikal Cossack Regiment,

less the sotnia in Port Arthur; 1st Tschitinsk Cossack Regiment; 1st Transbaikal Cossack Battery; and from the 6th East Siberian Rifle Division he had the 21st Rifle Regiment, less one company, which was left behind in the Priamur district as a measure of security, and the 1st Battery of the 6th East Siberian Artillery Brigade; altogether 11 companies, 11 sotnias, and 16 guns.

Major-General Mischtschenko was instructed to fall back in the direction of Fön-huan-tschön, if he should be unable to hinder a Japanese landing at Da-gu-schan. The Werchneudinsk Regiment, however, was to give way on Siu-yan and Hai-tschön. Depôts along the line of communication from Hai-tschön to Da-gu-schan were in working order at that time, in Tschau-dsia-pu-dsy, Siu-yan, Wu-laa-sa, and Si-tu-tschin-dsa.

The main body of the Eastern Detachment was distributed as follows:

I. For the defence of the right section, which extended 16 kilometres (10 miles) and consisted of three sub-sections, Major-General Kaschtalinski had under his command two battalions of the 10th Rifle Regiment, two companies of the 24th Rifle Regiment, the machine-gun company, the detachments of mounted scouts of the 9th, 10th, and 11th Rifle Regiments, and the 2nd and 3rd batteries of the 3rd East Siberian Rifle Artillery Brigade: in all 10 companies, 8 machine guns, detachments of mounted scouts about 400 strong, and 16 guns.

Major-General Kaschtalinski's force was to be distributed in detail as follows:

1. The detachment of mounted scouts of the 11th Rifle Regiment at Nian-tschan to guard the right wing and connect with Mischtschenko's Detachment.

2. One company of the 10th Rifle Regiment and two guns of the 1st Battery of the 3rd East Siberian Rifle Artillery Brigade at San-do-gou.

3. The detachment of mounted scouts of the 9th Rifle Regiment, at the junction of the U-da-gou with the Ya-lu River, to secure the right bank of the Ya-lu between San-do-gou and An-tung.

4. The 1st Battalion of the 10th Rifle Regiment, the machine-gun company, and 8 guns of the 3rd East Siberian Rifle Artillery Brigade, for the defence of An-tung town and the adjoining heights.

5. Two companies of the 24th East Siberian Rifle Regiment, the detachment of mounted scouts of the 10th Rifle Regiment, and 6 guns of the 3rd Rifle Artillery Brigade at Dsian-pao.

6. One company of the 10th Rifle Regiment to act as outposts on Kia-sin-tsa island.

7. Two companies of the 2nd Battalion of the 10th Rifle Regiment as a local reserve on the high ridge north of An-tung. After the arrival of the 3rd Battalion of the 10th Regiment (reached the Ya-lu on the 24th), one company of that battalion was to go to San-do-gou and one to Kia-sin-tsa island.[1]

[1] As one company of the 10th Regiment had gone from Fön-huan-tschön to Tschan-do-ho-kou on the 21st to act as escort to the mountain battery, and one company of the same regiment had been left behind on the line of communication, Major-General Kaschtalinski had only ten companies of the 10th Regiment after the arrival of its 3rd Battalion.

It cannot be ascertained how the two Sapper Companies were employed at this time.[1]

II. For the defence of the left section, extending 11 kilometres (7 miles) from Dsian-pao by Tiu-ren-tschin to Syn-dia-gou, and being split up into two parts by the Ei-ho, Major-General Trussow had under him the 12th and 22nd East Siberian Rifle Regiments, the detachments of mounted scouts of these regiments, and the 2nd and 3rd Battery of the 6th East Siberian Rifle Artillery Brigade: in all 20 companies, 2 detachments of mounted scouts 240 strong, and 16 guns.

III. The general reserve at Ten-sy was composed of the 9th and 11th East Siberian Rifle Regiments and the 3rd Battery of the 3rd East Siberian Rifle Artillery Brigade: in all 4 battalions and 8 guns.

Between the main depôt of Liao-yan and An-tung, seven intermediate depôts had been established along the line of communication leading over the Fyn-siao-lin Pass—namely, at Lian-dia-san, Ta-wuan, Lan-san-guan, Tu-yin-pu, Tin-dia-pu-sa, Fön-huan-tschön, and Wan-dia-pu-sa.

The Commander of the Cavalry on the *left* (Colonel Truchin) was directed to concentrate his reserve at Tsiu-liu-an to cover the road from Kuan-dian-san to Sai-ma-tsy. At the same time he was ordered to retreat by this road, if the Japanese should cross the river in considerable force. But the battalion from the 24th East Siberian Rifle Regiment, which, at the request of

[1] Were in An-tung on April 13.

Army Headquarters, had meanwhile been sent to Am-bi-ho in support of the Cavalry of the left wing, was to fall back on Fön-huan-tschön, in case of attack by the enemy. After two more companies of the 24th East Siberian Rifle Regiment, which had been in Fön-huan-tschön on April 13, had been detailed to relieve the companies of the 20th Rifle Regiment of the 5th East Siberian Rifle Division, which were guarding the line of communication from Siu-yan to Da-gu-schan, the 24th Rifle Regiment was therefore distributed within the space of Da-gu-schan, Am-bi-ho, Fön-huan-tschön, and north of it, as follows: 2 companies on the line of communication from Siu-yan to Da-gu-schan, 2 companies at Dsian-pao under the orders of Major-General Kaschtalinski, 1 battalion at Am-bi-ho, 2 companies as garrison in Fön-huan-tschön, and 2 companies between Fön-huan-tschön and Liao-yan.

Telegraphic connection between An-tung and Major-General Mischtschenko's headquarters at Ma-du-gu, as well as the connection by wire with the Cavalry of the left wing by way of Gu-lu-tzi, was at that time not yet interrupted by the enemy.

By order of Lieutenant-General Sassulitsch, only the 1st Line of Transport was with the troops, the 2nd was collected at Tan-san-tschyn-dsa, and the 3rd at Fön-huan-tschön.

As the Commander of the Eastern Detachment considered the general reserve at Ten-sy too weak, he asked Army Headquarters, when reporting by wire his new dispositions of the Eastern Detachment, for an early dispatch of the 23rd Rifle

Regiment, which was still at Mukden, as escort to the Headquarters of the Viceroy.

On April 24 the newly formed 3rd Battalions of the 9th and 10th East Siberian Rifle Regiments arrived from Europe and joined the Eastern Detachment.

Measures of the 1st Japanese Army at the end of April.

According to intelligence received at Kuroki's Headquarters up to April 24, the 1st Japanese Army was opposed by the 3rd Siberian Army Corps, composed of the 3rd and 6th East Siberian Rifle Division, by a number of mounted riflemen as well as by the Tschitinsk, Werchneudinsk, and Argunsk Cossack Regiments. The enemy's forces, which had been estimated at 15,000 Infantry, 5,000 Cossacks, and 60 guns, were, according to various reports received between April 22 and 24, distributed on a front of 220 kilometres (137·5 miles) between Tscho-san and Da-gu-schan as follows :

The crossings of the Ya-lu between Tscho-san and Tschan-do-ho-kou were occupied by Cossack Detachments, each 100 to 400 strong. Near Kuan-dian-san, or rather between that place and the Ya-lu at Siao-pu-si-ho, about 1,000 Infantry and as many horse, as well as some guns, were in support of those detachments. There were reported also 100 horse at Gu-lu-tzi, 1,000 Infantry, 1,000 horse, and 6 guns near the Hu-san, 4,000 to 5,000 Infantry with 24 guns at Tiu-ren-tschin, and behind these about 1,000 Infantry at Ha-ma-tan. Further, there were said to be, at An-tung, 3,000 to 4,000 Infantry, with 20 guns ; at Pu-za-wo-sa, 8 guns ; at Ta-tun-gou, 200 to 300 horse ; between

the latter place and Da-gu-schan about 1,000 men; at Da-gu-schan itself 300 horse; in the neighbourhood of Ten-sy, north of An-tung, 2,000 Infantry, with 8 guns; and still further north, at Tan-san-tschyn-dsa, 2,000 horse with 8 guns.

Some 3,000 more Infantry with 12 light guns, each drawn by one horse (probably baggage-carts or field-kitchens), had been observed advancing from Fön-huan-tschön on An-tung; and a report from spies, which, it is true, was not credited, stated that at Fön-huan-tschön itself there were 15,000 Infantry. Of Russian entrenchments, there had been recognised the shelter trenches on the heights, north and south of Tiu-ren-tschin, and some trenches more forward near the foot of these heights, the three groups of gun emplacements at Tiu-ren-tschin, and the strong fortifications near An-tung.

Close reconnaissances had meanwhile established the fact that to bridge the Ya-lu River beyond range of the Russian position was only possible above Wi-tschu. Army Headquarters thereupon resolved to cross the Ya-lu with the main body by Ku-ri-to and O-se-ki-to, and to advance with one division to attack the left flank and rear of the Russian position at Tiu-ren-tschin. To cover this crossing it was necessary to obtain possession of the Hu-san heights. Reports had shown that the movements of a mixed force would certainly be very difficult in this inhospitable, mountainous country, but not impossible. The 12th Division, being equipped with mountain guns, was apportioned to this section of ground. A favourable

spot for the Division to cross had meanwhile been ascertained at Schi-gu-pu.

The plan for forcing the passage of the Ya-lu, as originally arranged in Japan on lines similar to the operations in the Chino-Japanese War, was therefore changed, in so far only as General Kuroki determined to abandon the wide-turning movement of his right wing by Kuan-dian-san, and to keep the 12th Division in closer contact with the main body.

The bridging train of the Japanese was, however, far too small for the numerous bridges that were intended to be constructed. The Japanese Engineer Battalions, which consisted of three companies, were provided with a divisional bridging train, and an Engineer escort of forty men. It was directly under the General Officer Commanding the division, and could bridge about 144 metres (160 yards) of river.[1] Kuroki's Army was thus provided with only 432 metres (480 yards) of bridge to get over this river barrier. Therefore, as soon as Asada's Detachment had arrived, it began to collect junks, boats, and all kinds of timber. It was of great advantage to the Japanese that they found large stores of timber in the Russian settlement of Yo-nam-po. But even these were not enough by a long way for all the bridges that were intended to be constructed. Most of the raw material that was required had therefore to be shipped from

[1] Each divisional bridging train had 32 pontoons and 16 trestles. Those divisions which had Mountain Artillery carried the material on pack-animals. To be able to do this each half-pontoon could be broken up into three pieces. The weight of the steel pontoons was 274 kilogrammes (about 550 lb.). *Vide* Appendix IX.

Japan to Yo-nam-po and Li-ka-ho. At Yo-nam-po and Wi-tschu the requisite material, such as boats, trestles, roadways, anchors, iron dogs for eleven large or small bridges in all, was then prepared by Engineers and by carpenters from the Army and Navy, who were working strenuously day and night. The total length of bridge constructed from unprepared material and with the bridging train until mid-day of May 1 was 1,500 metres (1670 yards). But as numerous rafts had been permanently held in readiness, the bridging trains could only partially be made use of for these bridges. We must not omit to mention that considerable stores of iron, tools, and forging appliances fell into the hands of Asada's Detachment at Yo-nam-po.

On April 24 the extensive technical preparations for bridging the Ya-lu had been completed. The transport by road of the material that had been landed at Li-ka-ho did not cause any difficulty. But it was now a question of bringing the numerous boats and junks, which were to be used in bridge, and were laden with bridging material, from the mouth of the Ya-lu and Yo-nam-po up stream to Wi-tschu, past the Russian position at An-tung. This was successfully accomplished too. Under cover of Nakagawa's flotilla, which entered the Ya-lu and succeeded by an effective fire in diverting from the laden junks and boats the fire of the Transbaikal Battery on April 25, and that of the batteries at An-tung on the 26th, the transport, with all the material on board, was able to pass without serious loss over the dangerous

stretch of the Ya-lu, and reached Wi-tschu in the evening of April 26.

With the object of inducing the Russians to believe that a passage south of Wi-tschu and a landing of the 2nd Army west of the Ya-lu mouth were planned, portions of the Guard Division, which were quartered at Yo-nam-po, near the mouth of the Ya-lu and above that place, were ordered to line the river-banks at the same time Nakagawa's flotilla was entering the river. Simultaneously large ships appeared west of the mouth of the Ya-lu. By these measures, combined with the reports intentionally disseminated by the Japanese of an intended landing of the 2nd Army at the mouth of the Ya-lu, they actually succeeded in deceiving Russian Headquarters as well as the Commander of the Eastern Detachment, and inducing the latter to place his reserves behind his right wing.

As the Japanese thought that they must be prepared for a likely counter-attack by the Russians against the 12th Division (like the attack of the Chinese in 1894) while it was crossing the river, or afterwards advancing through the Hu-san mountains, they intended to engage the Russian position in front by a heavy fire of Artillery during that time.

In order to reach the main branch of the river, and to get batteries into position on the island of Sa-ma-lin-da, that island was captured during the night of April 25-6 by a battalion of the 2nd Division, after it had crossed over in pontoons. Shortly before daybreak, on the same date, a bat-

talion of the 4th Guard Regiment crossed over to the island of Ku-ri-to, and there surprised the detachment of mounted scouts of the 22nd East Siberian Rifle Regiment, which, however, succeeded in making good its escape into the heights of Hu-san, with the loss of 18 men, after it had crossed the Ya-lu, which is here about 80 metres (88 yards) wide. The consequence of the capture of these two islands was that the weak Russian outposts on the island of O-se-ki-to and on the Tiger Hill quitted the field too; but the Russians continued to hold the island of Kia-sin-tsa, opposite Antung.

Sketch 5. As early as the morning of April 25 the construction of bridge "a," close to and west of Wi-tschu, was begun by the Engineer battalion of the 2nd Division. These bridging operations were soon discovered by the Russians. First, four Russian guns appeared towards 9.30 a.m. on the Telegraph Hill (Telegraphen Berg), which the Japanese called Schiri-bachi-yama, and opened fire on the bridge at 10.25. Half an hour afterwards four more guns came into action north of the Schiri-bachi-yama. Fifty shrapnels in all were fired from the Russian batteries on the bridge, which was about 4,500 metres (5,000 yards) distant. Their effect was very small. All work, however, was stopped by order, and only resumed again in the evening. This trestle bridge was completed on the 26th. It was 236 metres (263 yards) long, and made from improvised material; it formed afterwards a link in the Japanese line of communication from Wi-tschu to Tiu-ren-tschin, but

was not used during the attack. It took 45 hours to build. But the Japanese had for the moment another object in view when they constructed this bridge. The bridge, as they had anticipated, was fired upon by some Russian batteries; the Japanese did not only succeed thereby in determining the exact position of the gun emplacements, but it also gave them information about the range and effect of the new Putilow gun, and further disclosed the fact that the Russian Eastern detachment was unprovided with heavy Artillery.

The construction of bridge "b," south of the first bridge, was taken in hand by the 2nd Engineer battalion as early as during the night of April 26-7. Screens and groups of trees hid this bridge (leading to the island of Sa-ma-lin-da) from the enemy's view. The construction of this trestle bridge, which was 80 metres (88 yards) long, and built from improvised material too, is said to have been finished in $7\frac{3}{4}$ hours. The Engineer battalion of the Guard constructed a couple of bridges ("c") over the Tun-ten-ho at Gen-ka-do, north-east of Wi-tschu, on April 26 and 28. The length of one bridge was 33 metres (37 yards), that of the other 34 metres (38 yards). The former took 4, the latter $8\frac{3}{4}$, hours to build. During the nights of April 26-7 and 28-9, the Engineers of the Guard Division constructed another couple of bridges (to the island of Kurito) at "d," over the near branch of the Ya-lu, in prolongation of the two Tun-ten-ho bridges. One was 108 metres (120 yards) and the other 113 metres (125 yards) long; time of construction, 13 and 16 hours.

They were fired upon at intervals without appreciable effect by a hostile battery, which was thought to be in the neighbourhood east of Ma-gu.

Up to the morning of April 29 the three Engineer battalions of Kuroki's Army had thus constructed six bridges in all from improvised material, and representing altogether a roadway of 599 meters (665 yards)—a very creditable performance under the prevailing circumstances. The river-islands at and above Wi-tschu, which were occupied by outposts, had now been all connected by bridges with the left bank of the Ya-lu. Army Headquarters had ordered the two pairs of bridges to be constructed over the Tun-ten-ho and to the island of Ku-ri-to, as the Guard and 2nd Division were to cross here at one and the same time.

Hand in hand with the building of the bridges proceeded the construction of military roads to these places of crossing, and of gun-pits on the heights north and south of Wi-tschu for the batteries, which were to be brought into action here, and of approaches leading into these positions. Shelter trenches were dug too.

According to the intelligence received as late as the morning of April 28, two strong groups—the enemy's main forces—were at Tiu-ren-tschin and at An-tung. Their strength and names were known. On both wings, east of the Ei-ho and west of An-tung, it was known that mostly Cossacks, with a few Infantry and Artillery, were facing the Japanese. On the southern banks of

the Ya-lu, in the neighbourhood of Tscho-san, five squadrons with mounted Chinese irregulars had also been reported (Madritow). The intelligence received thus furnished an absolutely correct picture of the situation.

Orders of the 1st Japanese Army to cross the river, and attack the Russian position.

The orders to cross the Ya-lu and attack the Russian position west of the Ei-ho were issued at 10 a.m. on April 28. These orders to the Army, a summary of which is given below, were but slightly altered during the next few days, and ran as follows:

1. The 12th Division will cross the river at Schi-gu-pu during the night of the 29th to 30th, and reach the line Ka-rei-ro-ko—height "291," east of Li-sa-wen, in the evening of the 30th.

A detachment of the division (strength to be determined by the Divisional Commander) will advance along the river, and reach the height north-east of the Tiger Hill.

The 12th Division will cover the crossing of the other divisions. If feasible a detachment is to be sent by Kyo-ka-ko against flank and rear of the enemy.

At daybreak on May 1 the division will occupy its position on the Ei-ho from Sai-rosni-ko to the height close west of Li-sa-wen inclusive.

2. The 2nd Division will be in assembly formation at Sha-san-do, east of Wi-tschu, at 10 a.m. on the 30th. It will start at midnight, April 30 to May 1, and march across its bridge to its position on the Isle of Ma-tu-zeo; right wing at Sa-ka-su.

The 2nd Field Artillery Regiment will time its arrival in the positions north of Kin-tei-to in such

a manner that fire may be opened at daybreak on April 30.

3. The Guard Division will be in assembly formation, east of Wi-tschu, at 10 a.m. on the 30th; it will then follow the 2nd Division and occupy its position between the 12th and 2nd Division.[1]

4. The Regiment of howitzers will move into its position at Kin-tei-to during the night of the 29th to 30th.

5. The General Reserve—2 battalions each of the 2nd and Guard Division, and 5 squadrons, of which two from the 2nd Division and three from the Guard Division—will be east of Ku-ri-to village at 4 a.m. on May 1. Another battalion of the General Reserve, to be furnished from the 2nd Division, will take up a position in advance, and to the left, of the howitzers in the night of April 29-30.

This intended enveloping attack turned out to be a frontal attack after all, as the Russians had meanwhile extended their left wing north as far as Tschin-gou. On April 25 the 3rd Battalion of the 11th Rifle Regiment had also joined the Eastern Detachment on the Ya-lu; the 3rd Battalion of the 12th Regiment was expected to arrive on April 26.

Lieutenant-General Sassulitsch had meanwhile received a whole series of telegrams from Liao-yan containing a vast number of detailed instructions, inquiries and directions, and defining somewhat

[1] Army Headquarters' intentions having been originally to let the 2nd and Guard Division cross the Ya-lu simultaneously, the wording of the order for the Army, as quoted here, seems to be one of the subsequent alterations.

more accurately the task of the Eastern Detachment on the Ya-lu. One of these telegrams, in which General Kuropatkin expresses his apprehensions regarding the retirement of men and baggage of the Eastern Detachment on the single road to Fön-huan-tschön, and to the passes further north, concludes as follows: "Are the roads in good repair; are you fortifying the position at Fön-huan-tschön, and preparing the destruction of supplies? It is very desirable that the Japanese should not be able to boast of any trophies." Soon afterwards General Kuropatkin requested Lieutenant-General Sassulitsch "to restore within the two divisions the units to their proper commands if the situation in the position on the Ya-lu makes it feasible."

Kuropatkin's renewed instructions to Sassulitsch. Changes within the Russian position at the end of April.

The following telegram arriving from General Kuropatkin at this time described the task of the Commander on the Ya-lu more definitely: "I distinctly hope that you will resist the enemy with the necessary obstinacy, and that you will at the same time clearly remember that you are not placed on the Ya-lu to fight a decisive action with the superior forces of the enemy."

Enlarging upon these directions the following telegram, dated April 25, came in from Lieutenant-General Sacharow, Kuropatkin's Chief of the Staff: "The Commander-in-Chief, in supplementing the directions he has given you, in which the object of the operations on the Ya-lu was stated to be to delay the enemy at the crossings of the river, and to procure intelligence about the enemy's strength, disposition, and direction of advance, has

ordered me to request you, when carrying out this task, not to enter upon an unequal fight, and to retire as slowly as possible into the hills so as to delay the enemy, if feasible, again there, before you continue your retreat. General Kuropatkin has further ordered me to call your attention to the fact that the Japanese, for some reason or other, may cease the forward movement after forcing the passages of the Ya-lu, or at any other period. In such a case the Commander-in-Chief begs you to be especially careful to keep in constant touch with the enemy, and not to separate from him to such an extent as would enable the Japanese to carry out their operations beyond your range of view and beyond your range of influence."

Reconnaissances by General Staff Officers, which had meanwhile been carried out by order of Lieutenant-General Sassulitsch, of the two roads west and east of the line of communication from An-tung to Fön-huan-tschön, which had to be considered for a retreat on Fön-huan-tschön, had made it clear that both the road An-tung—Sio-ge-pu—Sa-won-ga—Me-me-de, as well as the road Tiu-ren-tschin — Suan-schan-sa — Liu-schi-gou — Ta-pin-gou, leading through the difficult heights of the Tyn-hi-san, rejoined the main road again at Tan-san-tschyn-dsa.

Kuropatkin, to whom this was reported, thereupon ordered the road Me-me-de—Tal-Ta-tum-gou (valley Ta-tum-gou)—Kan-dia-pu-sa—Tschan-dia-pu-sa to be reconnoitred, so as to enable the Eastern Detachment to use two roads in its retreat from Tan-san-tschyn-dsa to Fön-huan-tschön.

The road by which Mischtschenko's detachment was to retreat from Da-gu-schan to Fön-huan-tschön was found to be in good repair when reconnoitred.

The transport and supply parks and columns, as well as the second-line regimental transport, were intended to be withdrawn at the proper moment from Fön-huan-tschön by the two roads to the Mo-du-lin, and the western Fyn-siao-lin Pass respectively, or still further even, according to circumstances, in the direction of Liao-yan. Only the first-line regimental transport was to remain with the troops.

Apart from entrenchments on the ridge north-west of An-tung, defensive works had meanwhile also been constructed in the neighbourhood of Ki-yan-dia-pu-sa and Pia-myn, where it was intended to cause the enemy further checks. On April 25 the following message arrived in Liao-yan from Lieutenant-General Sassulitsch: "I shall direct my particular attention to the strengthening of the position on the ridge north-west of An-tung, which is of far greater importance than the positions close to An-tung and on the road from Tiu-ren-tschin." "All commanders have orders to retire only when pressed by superior hostile forces, and to keep in constant touch with the enemy."

Between April 25 and 28 a whole series of further news reached the Eastern Detachment. Yet even these reports left Lieutenant-General Sassulitsch still in doubt about the real points of crossing selected by the Japanese. The most important of these news may be briefly quoted

here, since they most clearly illustrate the difficulties a defender has to contend with when there is a river between him and his adversary.

Sketches 3 and 5.

Reports received up to the evening of April 25 stated that three Japanese torpedo-boats had taken soundings near the Wan-da-tyn Peninsula, south of Da-gu-schan, on April 22, and that on the 24th hostile cruisers, torpedo-boats, and about ten other vessels had been sighted south of the Da-yan-ko estuary. Some further reports gave out that large stores of supplies had been unshipped on the island of Ta-choa, and that 8 large ships had arrived there. A fresh camp was reported to be at Lomba-gao. In the neighbourhood of Ko-schen about 100 Engineers were said to be occupied nightly with preparing bridging material since April 22; 70 pontoons had been ascertained at Mun-tschen-kol, about 100 pontoons at Wi-tschu, also extensive screens between Siao-tschen-fan and Mun-tschen-kol. In the neighbourhood of Ko-schen, Siao-tschen-fan, Mun-tschen-kol, and Wi-tschu, 600 farms were reported to be occupied by 30 to 50 men each; 24,000 men in all were said to be south of Wi-tschu, and other strong forces along the road from Wi-tschu to Pyöng-yang. Further news from spies stated that an Artillery Park of 50 guns had arrived east of Wi-tschu, and that the enemy's headquarters were at Kym-tschel-kol, north-east of the confluence of the Tun-ten-ho and Ya-lu.

It was further reported: 8,000 men south of Am-bi-ho, 200 men on the islands there, two regiments of Infantry, and three to four Cavalry regiments in the Ya-lu villages, 16 kilometres

(10 miles) south of Siao-pu-si-ho; in Siao-pu-si-ho itself 100 troopers, collecting boats and timber, and opposite that place and at Pyök-tong the arrival of strong hostile detachments. Chinese news stated that strong hostile forces were approaching Tschang-söng; 2,000 men were said to have already occupied that place. Colonel Truchin reported that he was in touch with Madritow, and that the country within a radius of 40 kilometres (25 miles) from Tscho-san was free from the enemy.

At this time Chinese and Korean natives freely talked with great positiveness that the forcing of the passage over the Ya-lu was close at hand; they also pretended to know for certain that the passage was intended to be made in the neighbourhood of Ko-schen, An-tung, and Tiu-ren-tschin. It would be done in three échelons, with 500 men, then 1,000, and finally with 10,000 men.

The Chief of the General Staff of the Eastern Detachment was not far wrong when he reported on that day:

"Intelligences on the impending Japanese attempt to cross the river are increasing. It is difficult to judge from these news what the plan for crossing will be like. The concentration of strong Japanese forces north-east of Wi-tschu points to an intention of operating in the direction of Am-bi-ho; on the other hand, all the main preparations for crossing have been noticed south of Wi-tschu, near the settlement of Ko-schen."

Major-General Mischtschenko further reported by telegraph, in the course of April 25, that Japanese

steam and sailing ships had been sighted south of Po-tin-sa, as well as at Wan-da-tyn and west of the Ya-lu estuary. According to intelligence from another quarter, a great number of junks had been noticed, and the sound of felling axes had been heard at Lom-ba-gao. At Ko-schen and opposite Tiu-ren-tschin the Japanese were said to be occupied for the last three days with bridging the two near branches of the Ya-lu, and to have started bridging, too, 15 kilometres (9·5 miles) above Wi-tschu. There had been further noticed: at Mun-tschen-kol about 50 pontoons; 3 kilometres (2 miles), and 15 kilometres (9·5 miles) above Wi-tschu, as well as at Tschan-do-ho-kou, a collection of boats and other bridging material. According to reports from spies, strong hostile forces were assembled in the country 15 kilometres (9·5 miles) east of Wi-tschu.

On the left wing, in the neighbourhood north of Tschan-do-ho-kou, two Japanese companies with a few troopers had crossed the river and there driven back some outposts of the Ussuri Regiment. Colonel Truchin says he had observed hostile forces crossing at different places as early as April 24, but had been unable to determine their strength or of what arm they were; Truchin had, therefore, ordered the 1st sotnia of the Argunsk Regiment in Siao-pu-si-ho to push patrols to the points of crossing, but to remain in Siao-pu-si-ho, and only retreat if in danger of being cut off. The Ussuri Regiment was charged with ascertaining the strength and direction of advance of the enemy's forces; the company, the 1st and

4th sotnia Argunsk Regiment, and the mountain battery were to delay a crossing at Siao-pu-si-ho.

How the situation was viewed in Liao-yan on April 25 appears from the following telegram of General Kuropatkin, which was received by the Chief of the Staff of the Eastern Detachment at 11 a.m.: "I request you to report personally. The attempts by the Japanese to cross will, for the present, probably be only of a demonstrative nature, but I feel uneasy about the direction Kuan-dian-san—Sai-ma-tsy. What can be done to face in this new direction without delay?"

During the night of April 25-26 the Japanese had taken possession of all the river islands, at and north-east of Wi-tschu. From the morning of the 26th the Eastern Detachment, facing Kuroki's Army, was separated from it merely by the western branch of the Ya-lu. The Japanese bridging material which had been prepared and collected at the mouth of the Ya-lu, was moving up stream for Wi-tschu. At Wi-tschu bridging operations had already commenced.

At early dawn of April 26, Major-General Mischtschenko reported that at 2.45 p.m. on the 25th two Japanese torpedo-boats and two other vessels had entered the Ya-lu and bombarded Ko-wan-gou, where a sotnia of the Tschitinsk Regiment was stationed, and that the two guns of the Cossack battery at A-mi-san had taken two hostile gunboats under fire, which had replied with 6-inch guns.

The thunder of the cannon had been audible from the direction of Ta-tun-gou since early

morning of April 26. News coming in meanwhile from natives stated that the Japanese were bridging the eastern branch of the Ya-lu opposite Tiu-ren-tschin, and 15 kilometres (9·5 miles) above Wi-tschu. A report came in from the right wing that Japanese ships from Ko-wan-gou, towing several boats apparently filled with troops, had entered the mouth of the Ya-lu.

The bridging operations, which were noticed at Wi-tschu, were effectively disturbed by the fire from the batteries at Tiu-ren-tschin, and from the small guns that had been captured from the Chinese at Tien-tsin in 1900 and attached to the mounted scouts of the 12th Regiment on the Tiger Hill. Russian accounts say that the Tiger Hill was thereupon fired on at intervals by Japanese batteries at Wi-tschu, which were so well screened that they could hardly be distinguished.

Bridging operations west of Wi-tschu were stopped in consequence of the Russian Artillery fire, but the transfer of troops to Sa-ma-lin-da continued in pontoons and boats.

It was meanwhile noon. Shortly afterwards a Japanese Infantry column with a battery was seen on Sa-ma-lin-da Island, moving in the direction of Tiu-ren-tschin. The 3rd Battery and the second half of the 2nd Battery of the 5th Rifle Artillery Brigade now directed their fire on this object, forcing the enemy within four minutes to seek shelter close by. Major-General Trussow, who at that time was commanding the troops at Tiu-ren-tschin, reported these events to Lieutenant-

General Sassulitsch at Ten-sy. This report arrived there at 3 p.m. In a further despatch, dated April 26, 10.30 p.m., Major-General Trussow expressed his opinion that the Japanese seemed finally determined to force the passage over the Ya-lu at Tiu-ren-tschin, by an enveloping attack with superior forces against the front and left flank of the Russians.

Major-General Trussow had disposed his troops at Tiu-ren-tschin as follows:

On the right, in foremost line, were 4 companies of the 22nd Rifle Regiment; behind them, in reserve, 2 companies of the same regiment; and at Tu-tschen-sa 1 company of the 22nd Rifle Regiment, the detachment of mounted scouts of the 10th Rifle Regiment, and 1 small post of observation. Here had also arrived, from the General Reserve, a battalion of the 11th Rifle Regiment, of whose arrival, however, Trussow had not yet been informed.

On the left, in front line, were 7 companies of the 12th Rifle Regiment; behind them, in reserve, 3 companies of the 22nd Rifle Regiment; further north, in the Ei-ho Valley, one company of the 22nd Rifle Regiment furnished outposts, half of it being at Po-tö-tyn-sa and half at Tschin-gou, with orders to withdraw on Ten-sy when opposed to superior forces of the enemy.

It is probable that the 3rd Battalion of the 12th Rifle Regiment arrived in Tiu-ren-tschin as well, on the evening of the 26th.

East of the Ei-ho there was nothing but the detachment of mounted scouts of the 12th Rifle

Regiment on the Tiger Hill. The detachment of mounted scouts of the 22nd Rifle Regiment, which had been pushed to Ku-ri-to Island on April 25, in the evening, had dispersed after its surprise on the early morning of the 26th, when it lost a third of its men and most of its horses. Some of them, who succeeded in gaining the Husan heights, rejoined in the course of the next few days. The telegraphic connection through Am-bi-ho with the Cavalry of the left wing had been cut by the Japanese before noon of April 26.

Spies had meanwhile furnished some further news during the afternoon. Japanese forces, which they stated had crossed north of Wi-tschu, were, according to them, marching upon Li-sa-wen. In forwarding these news Major-General Trussow had variously pointed out the danger that was threatening his left wing. Lieutenant-General Sassulitsch therefore ordered Major-General Trussow, shortly before midnight, to secure his left by sending a regiment and a battery from Tiu-ren-tschin to Tschin-gou.

As the Russians thought that Japanese attempts to cross at An-tung and Tiu-ren-tschin would after all not be unlikely during the night of April 26-27, all their troops were kept under arms. The night, however, passed off quietly.

General Kuropatkin, to whom the passage of Japanese forces between Tschan-do-ho-kou and Siao-pu-si-ho had been reported, had meanwhile, on the 26th, made the following request to the Commander of the Eastern Detachment: "In your telegram there is no reference whatever to

what the Japanese forces are doing, which have already crossed; reports on this point are very important. I beg you to wire me two or three times daily. We must bear in mind that we can inflict heavy losses on the Japanese while they are crossing." And further: "Considering the proximity of the bridge at Ma-tu-zeo, have you taken measures to inflict loss upon the Japanese when they are going to cross? I am further ill at ease by the want of Cavalry in the centre of our position. I propose you should demand one sotnia each from the Tschitinsk, Argunsk, and Ussuri Regiments, so as to form some divisional Cavalry."

Another despatch read: "I very much regret that no night attack has been made on Tiu-ren-tschin. I am convinced that the strong detachment there would have heroically repulsed several attacks of superior forces. Your numerous reports give us no idea of the position and strength of the enemy's forces that have crossed. An entirely passive observation may lead to disastrous catastrophes." Pointing out once more how necessary it is to keep in close contact with the enemy, and to harass and wear him out by demonstrations with small bodies, General Kuropatkin concludes as follows: "The incident with the detachment of mounted scouts of the 22nd Regiment has grieved me."

Meanwhile another report had come to Sassulitsch from Colonel Truchin, saying that only weak hostile forces had crossed in the neighbourhood of Tschan-do-ho-kou.

As connection with Am-bi-ho had been broken since April 26, Lieutenant-General Sassulitsch ordered the Cavalry Commander of the left wing to see that a new line was established by Kuan-dian-san to Fön-huan-tschön. At the same time the battalion of the 24th Rifle Regiment at Am-bi-ho and east of it was instructed not to let itself be riveted to Am-bi-ho, but to fall back on Hun-si-las, should the enemy occupy Li-sa-wen, and if necessary to retire still further, "to turn north and join with the Cossacks from the west."

During April 27 the Russians realised the enemy's position as follows: No hostile men-of-war had been sighted at Da-gu-schan on April 26 and 27, but there were rumours that thirty-five Japanese ships had arrived off the Island of Hai-an-dao. Major-General Mischtschenko reported that he had thereupon ordered the blocking of the mouth of the Da-yan-ho. A ship had stranded at the mouth of the Ya-lu. From that ship pontoons were brought by cutters to Lom-ba-gao.

Some hostile columns had been seen on the left bank of the Ya-lu, near Wi-tschu, early in the morning and towards 1 p.m.; these had been fired upon by Russian batteries. Opposite An-tung and Nian-tschan the Japanese had been seen entrenching, and towards 5 p.m. three Japanese battalions had been seen marching towards the bridge leading to the Island of Sa-ma-lin-da, opposite Ma-tu-zeo. At 9 p.m. General Trussow reported the crossing of considerable hostile forces over the bridges at Ma-tu-zeo and east of it, as well as to the Island of Ku-ri-to. As he became

anxious for his left flank, he ordered Colonel Meister late in the afternoon to occupy Tschin-gou with two companies and two guns. When there was as yet no report, even in the evening, from a general staff officer, who had been sent to the eastern bank of the Ei-ho, a reconnaissance of the Husan Heights, between the Ya-lu and Ei-ho, was ordered for the night of April 27-28.

How Lieutenant-General Sassulitsch viewed the situation on his left wing at this moment is apparent from his report to Kuropatkin: "Opposite our left the enemy has, up to the evening of the 27th, only occupied the Island of Ku-ri-to. It is possible that mere posts of observation have crossed over to the right bank of the Ya-lu. The protective measures which our troops have adopted are rather in excess of what is necessary, and may lead to exhaustion."

Kuropatkin's telegram in reply was not without a reproach: "Your report on superfluous measures of security, which might be of such a nature as to lead to exhaustion of the troops, disquiets me very much. A calm, brave leader must know what there is of danger, and understand how to regulate, in the presence of the enemy, duty and rest of his troops, and to procure for those who rest the possibility to sleep and to feed. The incident with the mounted scouts of the 22nd Rifle Regiment shows me that all is not as it should be with that regiment. Make all arrangements, reassure, encourage, and change the commanders, but take care that the scouts of the 22nd Regiment come out with honours from the test that awaits them."

On the report that a regiment had been sent to Po-tö-tyn-sa and half a battalion to Tschin-gou, Kuropatkin inquired whether the forces at Tiu-ren-tschin had not been too much weakened thereby, and further, whether the Ei-ho was a real obstacle in front.

Sassulitsch answered this despatch as follows: "The position at Tiu-ren-tschin seems extremely strong in front. The four battalions there and the battery are able to repulse any enemy in front. The forces sent to Tschin-gou and Po-tö-tyn-sa cover the flank of the whole detachment as well as the position at Tiu-ren-tschin. The Ei-ho is fordable only at certain places which are known. The river, therefore, is an obstacle, though not an impassable one."

The night of the 27th to 28th passed off quietly too. Major-General Trussow having fallen ill, General Kaschtalinski assumed command over the troops at Tiu-ren-tschin on the 28th. Major-General Mischtschenko's detachment continued on the right wing to watch the sea-shore between Ko-wan-gou and Pi-tsze-wo. Along the stretch of coast from Pi-tsze-wo to Da-gu-schan were $2\frac{1}{2}$ sotnias of the 1st Werchneudinsk Cossack Regiment; between Da-gu-schan and Ko-wan-gou $2\frac{3}{4}$ battalions of the 21st Rifle Regiment, the 1st Tschitinsk Cossack Regiment, $2\frac{1}{2}$ sotnias of the 1st Werchneudinsk Regiment, and the 1st Transbaikal Cossack Battery. On the left wing above Am-bi-ho, Colonel Truchin had with him one battalion of the 24th and one company of the 10th Rifle Regiment, 1st Argunsk Cossack Regi-

ment, 5 sotnias of the Ussuri Cossack Regiment, and the 1st Mountain Battery. The 6th sotnia of the Ussuri Regiment was attached to Madritow's detachment, which at that time was about 80 kilometres (50 miles) distant from Truchin's extreme left wing, and the only Russian reconnoitring party on the left bank of the Ya-lu.

Raids of Madritow's detachment in Korea.

Meanwhile, on the news that natives were collecting supplies and improving roads for the Japanese, Madritow had despatched Captain Bobrow from Tscho-san[1] with the detachment of Mounted Scouts of the 15th East Siberian Rifle Regiment, and the 6th sotnia of the Ussuri Regiment to Pyök-tong, and Captain Bodisko with the sotnia of Ossetin Volunteers, and portions of the detachment of mounted scouts of the 1st East Siberian Regiment to Wi-wön. Sketch 3.

Bobrow had entered Pyök-tong on the 22nd. The Korean garrison surrendered ninety-six rifles. The magazines established there were destroyed. Bodisko, who had west of Wi-wön encountered armed bands, which, it is alleged, were Japanese in disguise, and caused the detachment a loss of five men, was recalled by Madritow to Tscho-san.

Patrols sent by Bobrow to Tschang-söng had encountered Japanese patrols close behind Pyök-tong on the 23rd. Spies reported that strong hostile forces were advancing from Yöng-pyöng. On the strength of these reports Bobrow began to march back as early as the 24th, and joined Madritow again at Tscho-san on the 25th. On the 25th also the connection, that had till then

[1] P. 155.

been vainly attempted, was established with Truchin's Cavalry.

The events and reports of the last few days, however, had raised fears in Madritow that he might be involved in actions with the strong forces of the enemy, which were supposed to be approaching from Yöng-pyöng. Instead of making use of his favourable position beyond the river-barrier for reconnoitring round the Japanese right, against flank and rear of Kuroki's Army, a thing which he should have striven after by every possible means, Madritow resolved to evade the forces reported to be coming from Yöng-pyöng, and to operate against the Japanese line of communication. The "flying detachment" commenced its wide and sweeping turning movement, by Wi-wön, Ki-tschön, Tök-schön, An-tju, as early as the 26th.

The lines of communication of the 1st Japanese Army had, however, been transferred by that time to Tschöl-san and Li-ka-ho, and after the action on the Ya-lu, to An-tung. An attack by Madritow on An-tju, with the detachment of Mounted Scouts and the Cossacks, on May 10, failed, owing to a counter-attack of 70 Japanese reservists, Army Service Corps men, convalescents, and 70 Infantry, who perchance had arrived at An-tju. The Japanese were under the orders of the commandant of the An-tju depôt, a former non-commissioned officer of the regulars. A lasting interruption of the Japanese lines of communication by this detachment of about 500 men being impossible, Colonel Madritow determined

to withdraw. He was back again on the Ya-lu at Tun-kou on May 31. The Japanese had been for some time aware of Madritow's detachment, but they lay particular stress on the fact that no special measures had been considered necessary.

The Russians on the Ya-lu during the last days of April.

The Cavalry on the Russian left wing had meanwhile experienced the following on April 28: Colonel Leschitzki, to whom the passage of strong hostile forces in the neighbourhood of Syn-dia-gou had been reported, had early in the morning of that day, retired with two companies of the 24th Rifle Regiment, and four mountain guns from the neighbourhood of Am-bi-ho to Hun-si-las. Here he placed a company of the 24th Rifle Regiment to watch the road from Hun-si-las to Li-sa-wen. With the object of watching the Ya-lu portion from Am-bi-ho to Tschan-do-ho-kou, only one company of the 24th Rifle Regiment, a sotnia of the Ussuri Regiment, and two mountain guns had remained at Am-bi-ho, and a company of the 10th Rifle Regiment, and a sotnia of the Ussuri Cossacks at Gu-lu-tzi, all under the command of Colonel Gussjew. Information on what had become of the remainder of Colonel Truchin's forces can be gathered from Lieutenant-General Sassulitsch's despatch to the Commander-in-Chief: "Colonel Truchin has concentrated all his forces; he himself is at Gu-lu-tzi, and has left only two sotnias to watch Tschan-do-ho-kou, Siao-pu-si-ho, and Tsiu-liu-an. When I joined the Eastern Detachment I could not approve of these dispositions, because they laid open the road from Kuan-dian-san to Sai-ma-tsy,

which is so extremely important for our Army. I therefore ordered him to go at once with his reserve to Tsiu-liu-an, and constantly to cover the road to Sai-ma-tsy, if retreat should become unavoidable. I am, however, unable to report how far he had succeeded in doing so, as the Japanese, while he was at Gu-lu-tzi, had crossed above Tschan-do-ho-kou and Tsiu-liu-an. The two sotnias, which he left at Tschan-do-ho-kou and Tsiu-liu-an, were therefore obliged to fall back in the direction of Kuan-dian-san."

A vast amount of fresh intelligence arrived during April 28.

Mischtschenko reported that four ships towing pontoons had entered the Ya-lu, and further that 1 cruiser, 1 gunboat, 2 torpedo-boats, as well as 2 large sailing ships had been sighted off the Ya-lu estuary. Meanwhile the growth of the enemy's forces in the Tun-ten-ho valley, north of Wi-tschu, had also become known. The bridge, which was being constructed as alleged at the Island of Ku-ri-to, could not be seen into; but that a bridge was being built east of Ku-ri-to could be inferred from the sound of axes. Gradually more exact reports came in. Thus the patrols, who were sent towards Syn-dia-gou, Li-sa-wen, and Hun-si-las, had ascertained that the Island of Ku-ri-to was strongly occupied by the enemy, and that an enemy's outpost was already on the right bank of the Ya-lu, not far from the Tiger Hill. Soon afterwards Japanese reconnoitring patrols had shown themselves at Syn-dia-gou, opposite the Russian position of Tiu-ren-tschin. In the

afternoon and early in the evening more of the enemy's forces were seen to cross to the right bank of the Ya-lu at Ku-ri-to, but "not strong forces," as was reported by Sassulitsch to Liao-yan. The Russian outposts at Hu-san village had meanwhile been driven over to the western bank of the Ei-ho. Strong Japanese vanguards occupied at that time Hu-san and Li-sa-wen. The whole country between the Ei-ho and Ya-lu, the Hu-san heights, and the Tiger Hill were thus in possession of the Japanese advanced troops on the evening of the 28th. At dusk their reconnoitring patrols were seen already close in front of the Tiu-ren-tschin heights and in the Ei-ho valley.

The distribution of the Russian forces on the evening of April 28 was as follows:

At *Tiu-ren-tschin*: 1 battalion of the 11th Rifle Regiment, the 12th Rifle Regiment (3 battalions), 2nd Battery of the 6th Rifle Artillery Brigade, and probably the detachment of mounted scouts of the 12th Rifle Regiment as well.

At *Ma-gu* and *Po-tö-tyn-sa*: 2 battalions of the 22nd Rifle Regiment, 6 guns of the 3rd Battery of the 6th Rifle Artillery Brigade.[1]

At *Tschin-gou*: 1 battalion of the 22nd Rifle Regiment, 2 guns of the 3rd Battery of the 6th Artillery Brigade.

The effective strength of the companies, it is said, was not more than 190 men.

Major-General Kaschtalinski had therefore at his disposal only 5,400 rifles and 16 guns for the

[1] It cannot be ascertained where the company of the 24th Rifle Regiment, that had been pushed towards Li-sa-wen, retired to.

occupation of a position extending 15 kilometres (9·5 miles), or, more correctly speaking, for the occupation of the three positions, at Tiu-ren-tschin, Po-tö-tyn-sa, and Tschin-gou. No Cavalry was attached to this section of the ground. Apart from the despatch of the machine-gun company at the last moment, these weak forces were not even strengthened when the whole of the 1st Japanese Army began to attack them on May 1, because the Japanese succeeded in keeping the Commander of the Eastern Detachment to the last moment anxious for the safety of his right wing.

With *the General Reserve at Ten-sy*: 8 to 12 kilometres (5 to 7½ miles) distant from the Russian position, Tiu-ren-tschin—Tschin-gou, were the 9th Rifle Regiment, 2 battalions of the 11th Rifle Regiment, and the 3rd Battery of the 3rd Rifle Artillery Brigade.

On the right at *An-tung*, the wing which was not attacked, were 2½ battalions of the 10th Rifle Regiment, 2 companies of the 24th Rifle Regiment, the detachments of mounted scouts of the 9th, 10th, and 11th Rifle Regiments, the machine-gun company, and the 1st and 2nd Batteries of the 3rd East Siberian Rifle Artillery Brigade.

Along the line of communication, An-tung—Lian-dia-san, we find at this time 1 company of the 10th and 2 companies of the 24th Rifle Regiment, and in Fön-huan-tschön itself 2 companies of the 24th Rifle Regiment; 2 more companies of the 24th Rifle Regiment guarded the line of communication, Hai-tschön—Da-gu-schan.

A telegram from Sacharow, arriving on the 28th,

announced the departure of further reinforcements. According to this wire there were to depart from Liao-yan, between April 29 and 30, on Fön-huan-tschön, half of the 4th Battery of the 6th and the 4th Battery of the 3rd Rifle Artillery Brigade; on Kuan-dian-san, by Ta-am-pin (An-ping) and Sai-ma-tsy, 2 battalions of the 23rd Rifle Regiment, 4 sotnias of the 2nd Tschitinsk Cossack Regiment, and half of the 4th Battery of the 6th Rifle Artillery Brigade.

This telegram closes as follows: "The Commander-in-Chief presumes that the arrival of the 23rd Rifle Regiment will be used to do away as much as possible with the scattering of the 6th East Siberian Rifle Division, and especially with that of the 24th Rifle Regiment, so as to have 7, or at any rate not less than 6 battalions, united under the Divisional Commander" (at Ten-sy).

This despatch shows how little Russian Headquarters believed at this time in Kuroki's imminent attack, and that they were not, even on the 28th, clear about the direction of this attack; for otherwise it is hardly likely that the above-mentioned forces would have been sent by Sai-ma-tsy on Kuan-dian-san. A further sign, that the forcing of the passages of the Ya-lu by the Japanese was thought to be still very remote, was that Rennenkampf's Cossack Division, which had been pushed forward on Sai-ma-tsy and Kuan-dian-san after the skirmish on the Ya-lu, moved off to Schaho-pu for divisional drill on April 28.

The actual strength of the Eastern Detachment, which was scattered over a front of 150 kilometres

(94 miles) between Da-gu-shan and Gu-lu-tzi, was, it was alleged, only 19,000 rifles, 650 mounted scouts, 8 machine guns, 2,800 sabres, and 50 guns (6 of which were horse and 8 mountain), altogether, including the Artillery, about 25,240 men; and the total strength, including non-combatants, only 27,670 heads in all, as some of the units were not at full war strength. In the left section, from Tiu-ren-tschin to Tschin-gou, however, which was attacked by Kuroki, were only about 6,100 men of this total, including the Artillery, and these were left without support, even when Lieutenant-General Sassulitsch resolved to meet the attack.

This is the more surprising as the strength of the Japanese forces facing the Eastern Detachment, particularly those reported above Wi-tschu, had been considerably over-estimated. The intelligence collected on that point varied between 45,000 and 75,000 men. Native reports mentioned about 30,000 men and 50 to 80 guns at Wi-tschu, 8,500 men opposite Am-bi-ho, and further upstream, as far as Siao-pu-si-ho, 7,000 to 8,000 Japanese Infantry and Cavalry. Two thousand Japanese were reported at Tschang-söng.

It was assumed that General Kuroki was in command of the Guard, 2nd, and 12th Divisions, as well as of the 2nd and 12th Reserve Brigades. According to reports from spies, the Guard Reserve Brigade had also arrived. The strength of these three divisions and two reserve brigades was estimated at 48 to 54 battalions, 15 squadrons, and 30 batteries, at least.

The fact, strange in itself, that the exact

strength of the Japanese forces which had landed in Korea was successfully kept secret, whilst the Japanese at this period not only knew the disposition of the Eastern Detachment, but of all the Russian land forces in detail, becomes less strange if we remember that, apart from an excellently organised and well-paid spy and intelligence system, the Japanese were able to extract from Russian prisoners and deserters quickly every information they wished to obtain. The Russian Press, too, frequently blabbed out something worth knowing. The stringent supervision of the Japanese Press, on the other hand, should serve us as a pattern to be imitated; and particular stress must be laid upon the fact that that Press proved to the naval and military authorities, that it was thoroughly imbued with the importance of keeping secret every military intelligence. But otherwise, too, everything was done by the Japanese to keep the enemy, not only ignorant as much as possible about their own intentions, but also to mislead him by spreading false intelligence.

Though General Sassulitsch would not believe that an attack by the Japanese was imminent, yet he felt uneasy, on account of the frequent reports he received about the great activity which his adversary was displaying. He therefore resolved to have the heights of Hu-san reconnoitred by a detachment of all arms, in order to ascertain what was really in front of him, and how far the enemy had already gained a footing on the western bank of the Ya-lu. Lieutenant-Colonel Linda, of the General Staff, was ordered to carry out this recon-

naissance, for which purpose a battalion of the 22nd Rifle Regiment, the detachments of Mounted Scouts from the 10th and 12th Rifle Regiments, as well as two guns, were placed at his disposal. The small detachment started before daybreak on April 29, crossed the Ei-ho, and penetrated into the Hu-san Mountains. At dawn they met the enemy. It was an outpost company of the Guard Division, which on the previous day had been pushed forward from the island of O-se-ki-to to beyond Syn-dia-gou, so that, under its protection, the site for bridge "f," as well as the position of deployment and the Artillery position, could be reconnoitred. After a brief skirmish, in which the Russians were effectively supported by a battery at Po-tö-tyn-sa, the Japanese had to give way before this superior force. They slowly withdrew on Ku-ri-to. The Russians followed; but, when they were not far from Tiger Hill, they came under a heavy shrapnel fire from a battery that came in sight north of Wi-tschu, and obliged them to desist from further pursuit. They remained, however, at the Tiger Hill, where they entrenched themselves.

The Japanese commence to cross the river.

Meanwhile all preparations for the crossing of the 12th Division were in full working order. The division had started from Wi-tschu on the evening of the 28th, and arrived at Schi-gu-pu towards midnight. Arrangements were made to construct the bridge without delay. As the branch of the Ya-lu,[1] which was to be bridged at

[1] The western branch is shallow, and can be forded without any further preparation.

Schi-gu-pu, is about 230 metres (255 yards) broad and 8 metres (26·5 feet) deep,[1] and as the current proved moreover to be 1·80 metres (6 feet) per second, the preliminary arrangements occupied a good deal of time. It was noon on the 29th when the bridge itself could be commenced.

In order to be able to repulse any attempts of the enemy to disturb the work, the Artillery had taken post north-east of Schi-gu-pu village, while pontoons were held in readiness to ferry Infantry across.

On the island of the river were some Russian outposts, who, however, soon after the arrival of the Japanese, withdrew across the western shallow branch of the river. Towards 11 a.m. 40 to 50 of the enemy's riflemen, apparently dismounted horsemen, with two guns, appeared on the right bank, and began firing at the bridge. The Japanese mountain guns at once took up the fire and soon silenced the hostile guns. The Russians then disappeared from the bank; only a few skirmishers remained behind, who continued firing until Japanese Infantry crossed the river and drove back the weak Russian outposts. At 2 p.m. a battalion was already on the right bank of the Ya-lu; the enemy withdrew in a westerly direction.

While the Infantry, which had been advanced to the western bank, was digging shelter trenches, and thus provided a kind of bridge-head, the construction of the bridge was eagerly pursued. It

[1] The eastern branch of the Ya-lu at Schi-gu-pu is about as broad as the Rhine at Coblenz.

became apparent that bridging the river on this spot would cause numerous difficulties. The available bridging train was not sufficient; improvised material had therefore to be used. It was 3 a.m. on April 30 before the bridge was completed. Then the troops began to cross at once. The division was, according to orders, to reach the line Ka-rei-ro-ko—height "291" east of Li-sa-wen on the evening of the 30th.

The advance was made in three columns. The northern column consisted of the 47th Infantry Regiment and a mountain battery; it first marched up the valley of the Am-bi-ho, and then right across the difficult mountainous country to Ka-rei-ro-ko. To the centre column, which was at first moving down the Ya-lu valley and then turned to the north, belonged the 24th and 14th Infantry Regiment as well as four mountain batteries; the southern column, which was marching down along the western bank of the Ya-lu to the height marked "291," was composed of the 46th Regiment and a battery.

The march was, owing to the want of suitable roads, very difficult and exhausting, especially for the northern column, but nevertheless, the division had reached the line indicated by noon on the 30th. When the head of the left column was approaching the object of its march, it met a hostile party about a battalion strong. The Japanese deployed some skirmishers and advanced against the Russians. Meanwhile the advanced guard of the centre column had arrived too, and at once prepared to envelop the enemy's left

flank. The Russian detachment, however, did not wait for the assault, but after a brief fire-action withdrew with some loss across the Ei-ho.

During the night of April 29-30, the preliminaries for the attack on the Russian position had also made progress in the other two Divisions of the 1st Army.

Gun-pits had been prepared for the Artillery of the 2nd Division on the Island of Sa-ma-lin-da close to the Ya-lu; corduroy roads led across the level, soft sand from Wi-tschu into these positions. A special road had to be improvised for the howitzers as well; bridge "a" was strengthened by covering the roadway with mats and interpolating sampans,[1] to allow the heavy guns to cross. The shrubs and small trees of the island facilitated the creation of good screens or masks. The batteries of the 2nd Division and the howitzers had been got into position by the early morning on the 30th; the howitzers, 12 centimetre (4·8 inch) Krupp guns, had unlimbered south of the 2nd Artillery Regiment, and 5,000 metres (5,550 yards) from the enemy's position. Of the Artillery of the Guard Division one brigade had been pushed to the Island of Ku-ri-to north of the two "d" bridges; while the other brigade was with two batteries close north of Wi-tschu; one battery was brought into position on the Gen-ka-do by means of a zig-zag road, which had been constructed after great exertions on the rocky ground. Sketch 5.

The bulk of the 2nd and Guard Division was

[1] A kind of boats.

still east of Wi-tschu on the morning of the 30th. Two battalions of the 30th Regiment had been pushed to Sa-ma-lin-da as escort for the Artillery; of the Guard Division, one battalion of the 2nd Guard Regiment was on the Island of O-se-ki-to, the 1st Battalion of the 4th Guard Regiment had advanced as far as the heights north of Tiger Hill.

Lieutenant-Colonel Linda's detachment, which on the 29th had pushed back the outpost company of the Guard Division and entrenched itself at the Tiger Hill, had retired at daybreak, after the Guard Artillery had fired a few rounds at the Tiger Hill.

Bombardment of the Russian position.

With the object of preventing the enemy from attacking the 12th Division in its isolation while it was marching through the Hu-san mountains, General Kuroki had, as we have already mentioned, ordered for the 30th a general bombardment of the Russian position, as well as of the country behind it. As it was also intended to crush the Russian Artillery at the same time, the opening of the fire had to be delayed until the enemy's batteries, whose sites could not be clearly distinguished, betrayed their position themselves. Whereas on the previous days the enemy's Artillery had regularly opened fire about 7 a.m. for a short time, all remained quiet in the Russian position on the morning of the 30th. All that was noticed on the heights opposite was, as used to be observed on other days, the unconcerned appearance of groups of horsemen, probably Generals and their Staffs, and the coming and going of many people.

At 10 a.m. the moment the Japanese were looking for at last arrived. When a small party of Japanese Engineers entered the boats along the bank of the Ya-lu, and pushed them off to take soundings between Ma-tu-zeo and Sa-ma-lin-da Island, shells suddenly struck the water close to the pontoons, and the flash of guns was noticed at the same time on Telegraph Hill. This was the signal for the Artillery of the 2nd Division and for the 12 centimetre (4·8 inch) howitzers to open fire. The effect seemed extraordinary. The heights, which were covered with numerous small trees, looked after a few minutes as if they had been swept clean. The eight Russian guns, however, tried to fight as best they could against the superiority of the Japanese, namely against 36 field guns and 20 howitzers. They directed their fire chiefly on the left wing of the 2nd Artillery Regiment, and obtained some success there. The right wing as well as the howitzers did not receive a single shot. The Russian battery could not of course carry on this unequal fight for long; already half an hour afterwards a slackening in the amount and accuracy of their fire was noticed, and about 11.30 a.m. their fire altogether ceased.

At 11 a.m. some guns had also appeared north-east of Ma-gu and entered the fight against the Artillery of the Guard Division, which had swept the country behind the Tiger Hill as well as the Ei-ho valley. Here also the action was soon decided in favour of the Japanese. Not long after 11.30 the Russian Artillery fire had died through-

out the length of their position. Towards 1 p.m. the Russian batteries tried once more to take up the fight; but they were taken under fire by the whole Artillery of the 1st Army, and ultimately silenced for that day. After fighting down the hostile batteries the Japanese Artillery directed its fire on the whole of the Russian position, while the howitzers mainly searched and swept[1] the ground behind it. Three posts of observation had been erected prior to this on the heights south of Wi-tschu, and were connected by telephone with the batteries. From these look-outs the country behind the Russian front could be seen into. The Japanese Artillery fire, with short breaks and sometimes increasing enormously in strength, lasted until 5 p.m. Compared, however, with the amount of ammunition spent (several thousand rounds were fired, it is said), the effect was not very great, although the Japanese did excellent practice, as their enemies have testified. Apart from the Russian batteries, which lost several officers and a great number of men, only the 11th and 12th Rifle Regiments had some few losses. The other units had not suffered from fire, as the shelter-trenches had not been occupied, and the reserves had been well under cover. But the fire is nevertheless said to have produced an extraordinary moral effect.

General Kuroki had at any rate attained his object; the 12th Division crossed the Hu-san mountains unmolested, and reached its appointed

[1] The Japanese 12 centimetre (4·8 inch) howitzers had common shell and shrapnel shell.

place while the Artillery duel was still in progress. A small flank-guard, which was branched off from the southernmost column, advanced as far as the height "192," north-east of Syn-dia-gou, and established connection with the Guard Division, one battalion of which had been posted in the country north of Tiger Hill.

When the Artillery fire had ceased in the afternoon on the 30th, the work for bridging the Ya-lu's main arm was commenced. As it was intended to pass the Guard and 2nd Division over to the other side at one and the same time, two bridges were to be thrown also across the main branch of the river, similar to the two pairs of bridges "c" and "d." One division was to cross west of the Ku-ri-to settlement, so as to move on Li-sa-wen, while the other division, covered by Tiger Hill, was to traverse O-se-ki-to Island and gain the right bank of the Ya-lu at Syn-dia-gou. The construction of the two bridges ("e" and "f") required for this latter division was intrusted to the Engineers of the Guard Division, who had the bridging train of both divisions at their disposal. Bridge "g" was to be built by the 2nd Engineer Company from improvised material. The order was to complete the bridges "e" and "g" by 8 p.m. The construction of bridges "e" and "f" proceeded undisturbed by the enemy and without much difficulty, though the bridge at Syn-dia-gou was not completed till late at night. On the other hand, owing to the great width of the river (310 metres, or 345 yards), it was impossible to complete at the appointed time bridge "g" with

improvised material. Headquarters had ultimately to abandon the use of that bridge; and since the two divisions could thus not cross simultaneously, but only one after the other, the hour for the advance was now fixed for 8 p.m.

In order to get the Artillery of the 2nd Division as well across the stream, from Sa-ma-lin-da to Ma-tu-zeo, during the night of April 30 to May 1, ferries were prepared at the same time the bridges were being built. At the Gen-ka-do twenty-two pontoons were formed into rafts, and then floated down-stream as far as west of Wi-tschu. But only the 2nd Battalion of the 30th Regiment (the 3rd Battalion had joined the General Reserve) and the 1st Brigade (Abteilung) of the 2nd Field Artillery Regiment were successfully brought over to the other side of the stream, which is here 350 metres (388 yards) wide; the 2nd Artillery Brigade (Abteilung) then followed early on the morning of the 1st.

The howitzers, too, moved forward on the 1st, but only as far as the eastern bank of the Ya-lu; three batteries were able to use the cover abandoned by the 2nd Field Artillery Regiment. Fresh cover was provided for the 4th and 5th Batteries to the left of the former. The distance to the enemy's position was still 3,500 to 4,000 metres (3,800 to 4,440 yards).

At 8 p.m. the 2nd Division began to advance over bridge "e"; at 10.30 the Guard Division followed. Bridge "f" not having been completed before midnight, a somewhat lengthy halt had to be made on O-se-ki-to Island; at 5 a.m. both divisions had crossed this bridge too.

At daybreak the divisions had arrived in their appointed sections of ground on the flat islands between the Ya-lu and Ei-ho. The Guard Division was with its right (1st and 3rd Battalions of the 1st Guard Regiment) south-west of Li-sa-wen; with its left (1st Battalion of the 4th Guard Regiment) north-east of Sa-ku-sa. The Artillery had moved into prepared positions close west of Syn-dia-gou. The 2nd Division adjoined the Guards with its right wing (1st and 2nd Battalions of the 4th Infantry Regiment); its left wing (16th Regiment) extending as far as south-east of Ei-ho-dsian. Still further south was the 2nd Battalion of the 30th Regiment, which served as escort to the Artillery. In the north the 12th Division had advanced to the Ei-ho too, so as to be in touch with the Guard Division, its right wing extending as far as west of Ka-rei-ro-ko; the Artillery of the division was in advance of Li-sa-wen.

Disposition of the Japanese early on May 1.

Sketch 5.

Skirmishing lines had advanced along the whole front, and entrenched themselves opposite the enemy's positions; a distance of 1,000 to 1,500 metres (1,110 to 1,660 yards) was still separating them from their enemy.

The General Reserve (the 2nd and 3rd Battalions of the 4th Guard Regiment, the 1st and 3rd Battalions of the 30th Infantry Regiment, the Guard Cavalry Regiment, and Cavalry of the 2nd Division) was still at Ku-ri-to, near the bridges "e" and "g"; the Commander-in-Chief of the Army and his staff were on the Gen-ka-do.

Reconnaissances had been going on for some days to ascertain the nature of the Ei-ho. As

the river had to be crossed by the whole Army on a broad front on May 1, it was of the utmost importance to establish the depth of water outside the known fords. Since the war of 1894 many changes had occurred in the valley of the Ya-lu, and therefore intelligence about the Ei-ho, which originated from that time, could no longer be relied upon. Headquarters had ordered the divisions to continue reconnoitring until the actual attack would begin, so that there should be no surprises in store at the decisive moment. Care was also to be taken to have means for crossing ready at hand, so as to be prepared for all emergencies. All apprehensions proved to be groundless, since the Ei-ho, where it was deepest, hardly reached up to the men's chests. But as a matter of fact, the reconnaissances had not yet been completed when the general advance began along the whole line, and so it is related that many took part in the attack naked.

The Russians immediately before the Japanese attack.

The "reconnaissance in force," arranged by General Sassulitsch, had no great result. As usual, Russian Headquarters remained in the dark about the object of the Japanese movements, and how far their preparations for the attack had already progressed. Even after some Japanese Infantry had crossed at Schi-gu-pu, and pushed back Lieutenant-Colonel Gussjew's detachment at Am-bi-ho, the Russians were not yet convinced that the Japanese were going to advance with strong forces through the Hu-san mountains. Anxiety had certainly been felt during the last few days for the left flank, as is proved by the

despatch of a battalion of the 22nd Rifle Regiment with two guns to Tschin-gou on the 28th; but General Sassulitsch was chiefly afraid that the Japanese would sweep around still further to the north. For this reason Colonel Gussjew had been directed to withdraw from Am-bi-ho in a north-westerly direction, so as to join Colonel Letschitzki, who was with three companies and four guns at Hun-si-las. The three sotnias of the Ussuri Cossack Regiment were sent to Tsiu-liu-an, 32 kilometres (20 miles) north-east of Am-bi-ho, where they joined Colonel Karzew's[1] detachment, who at that time was in command of the Cavalry of the left wing. The country that was in actual danger, the ground between the Ya-lu and Ei-ho, was thus almost denuded of any troops. Sketch 3.

How little General Sassulitsch was informed of the danger which was threatening by the 12th Division from Am-bi-ho is apparent from the fact that, after receiving the report of Lieutenant-Colonel Gussjew's retreat on Hun-si-las, he sent orders to Colonel Letschitzki to drive the enemy, who had crossed at Am-bi-ho, from his position and pursue him across the Ya-lu; that he would place at his disposal for this purpose a battalion of the 22nd Rifle Regiment and four guns. The detachment of Mounted Scouts of the same regiment was likewise ordered to move forward and attack Am-bi-ho.

Kuropatkin, too, had formed a similar idea of the situation. Having received knowledge of the events at Am-bi-ho, he sent to the Commander

[1] Commander of the 1st Argunsk Transbaikal Cossack Regiment.

of the Eastern Detachment a telegram to the
Sketch 3. following effect: "Do everything to make Colonel Letschitzki's advance a success. The Ussuri Cossacks must take an active part in it. You have probably charged the latter to carefully watch the Pu-yi-ho valley as well."

A little later the following additional telegram arrived: "Don't you think that the Infantry and Cossacks at Am-bi-ho have withdrawn without any reason in too great a hurry, and too far? We must certainly retire under pressure of the enemy, but in no case must we lose touch with the enemy. In the event of success, we must not be satisfied with that alone, but make every effort to watch the enemy's operations. When the instructions which you have given to Colonel Letschitzki are carried out successfully, it will be expedient to clear the country between the Ei-ho and Pu-yi-ho of small Japanese detachments. I think the Japanese operations thus far betray very little energy; what is happening on your left wing looks very much like a demonstration. Watch the whole line constantly, and be prepared for an attack on the centre and left wing of our position."

In the evening of April 29 reports arrived at Headquarters of the Eastern Detachment which showed matters between the Ya-lu and Ei-ho in a somewhat clearer light. Colonel Truchin sent a despatch from Tsiu-liu-an, in which, in addition to some details about the distribution and position of his Cossacks, he reported that the enemy had obtained a firm footing in the Hu-san mountains,

and was steadily increasing in strength. This intelligence was soon afterwards supplemented by a report from Colonel Letschitzki that about 1,000 men with several mountain guns were on the heights east of Li-sa-wen, and that the enemy had already proceeded to dig shelter-trenches, with the object of strengthening his position.[1]

These news did not yet bring about a change in the views on the situation; but the night which followed removed any further doubt that the Japanese were determined to force the passage of the Ya-lu with the whole of the 1st Army. General Kuropatkin gained from the reports and despatches which were sent to him the impression that a collision with the enemy was imminent; he therefore sent to Lieutenant-General Sassulitsch a telegram to the following effect:

"The first, though perhaps unimportant engagements of the troops exercise a great influence on their spirit in the subsequent and more serious actions; it is therefore highly important that our first encounters, even if retreat before a numerically superior enemy become necessary, should give testimony of the superiority of our troops over the Japanese. The following is therefore not only desirable but absolutely necessary: a most careful preparation, making sure of being in adequate force; a circumspect and energetic direction of the troops entrusted to your care during the various operations. One of the chief requirements for successful

[1] The 12th Division had not yet got so far at that time. This report was based, perhaps, upon the fact that the Guard Division had pushed out a detachment into the country north of Tiger Hill.

operations is the knowledge of the strength and dispositions of the enemy.

"From the despatches hitherto received, I cannot yet discern that steadfast and constant vigilance, which must know of no rest by day or night, to reconnoitre the enemy's movements and preparations for crossing. Special points must be selected to watch the enemy, and specially chosen officers must be charged to do it. It is highly important to keep in closest touch with the enemy. The performances of the Ussuri and Argunsk Cossack Regiments are, according to your despatches, in this respect exceedingly poor. Tell this, my opinion, to the Colonels of these regiments. I further consider it necessary that you should have full knowledge of everything that is going on with the individual and necessarily separated portions of the Eastern Detachment, and that connection between them is permanently maintained. I miss in Colonel Truchin the efforts and intelligence to maintain this connection."

The night of April 29 and 30 passed without disturbance. No change was made in the position of the Russians. Lieutenant-Colonel Linda's Detachment remained near the Tiger Hill. Colonel Gromow had crossed the Ei-ho in the afternoon on the 29th, with a battalion of his regiment and two guns, probably in support of him, and had posted himself in the neighbourhood south of Li-sa-wen, where he remained for the night.[1]

[1] From the sources available it cannot be ascertained at whose instance and when Colonel Gromow carried out this movement.

On the morning of April 30 no movements at all were noticed on the Japanese side. No target was therefore offered, for the moment, to the battery entrenched on the Telegraphen Berg (Telegraph Hill). When, however, towards 10 a.m. some armed boats were noticed on the Ya-lu, west of Wi-tschu, the 2nd Battery of the 6th Rifle Artillery Brigade at once directed its fire thither. Scarcely had the first shot been fired when the enemy began to fire with Artillery too, and very quickly proved superior in number and calibre of guns; to such an extent that Major-General Kaschtalinski ordered the Battery at 11 a.m. to desist from an altogether hopeless contest. The four guns, too, of the 3rd Battery of the 6th Rifle Artillery Brigade, which were in position north-east of Ma-gu and had joined in the action, soon ceased to fire. The Japanese batteries, however, continued with their fire without interruption, frustrated in a few minutes an attempt by the Russian guns to fight once more against overwhelming odds, and searched and swept the position throughout its length and breadth with common shell and shrapnel shell. The fire lasted till late in the afternoon; the projectiles of the heavy howitzers tore up the slopes and hillocks of the Russian position, but for all that they did not do any serious damage.

When, about midday, the heads of the columns of the 12th Division emerged from the mountains east of Li-sa-wen, Colonel Gromow, finding himself threatened in front and flank, withdrew, after a brief skirmish, over the Ei-ho into the position of

Po-tö-tyn-sa. Prior to this Lieutenant-Colonel Linda had joined him, when his position on Tiger Hill was no longer tenable in the face of the enemy's Artillery fire. Thus the whole country between the Ya-lu and Ei-ho was in possession of the Japanese since midday on the 30th.

Through the events at Li-sa-wen General Sassulitsch obtained the conviction that strong Japanese forces had already gained a footing on the eastern bank of the Ei-ho. He therefore directed Colonel Letschitzki's operation, for which he had promised support, to be cancelled.

The systematic bombardment, lasting for seven hours, gave, moreover, a clearer insight into the enemy's intentions. The Russian Commander now saw that the Japanese were not merely demonstrating, but that the Artillery fire was the prelude to the contest for the passage of the river, which was going to be fought on the Ya-lu and Ei-ho at a very early date.

General Sassulitsch, therefore, prepared for the expected attack. The various commanders of sections received directions, in which their task, in case of attack, was defined; an operation order embodying the whole of these directions was, however, not issued. The distribution and disposition of the various units were maintained in the manner which had already been arranged for some time. The only difference was that Colonel Zibulski was to prepare a fresh position for the 2nd Battery of the 6th Rifle Artillery Brigade, south-west of Tiu-ren-tschin, as the battery was too much exposed on the Telegraphen Berg (Tele-

graph Hill) to the enemy's Artillery, and had already lost one gun.

The Russian position extending along the western bank of the Ei-ho was, on the whole, a strong position. The country rises abruptly from the river valley to a height of 60 to 112 metres (200 to 370 feet), with sometimes very steep slopes, and forms a continuous chain of hills and hillocks, separated from each other by some few deep gorges only. Especially the Telegraph Hill is distinguished by precipitous and almost inaccessible slopes on all sides. The defender's field of fire was very good throughout, to a distance of even more than 1,000 metres (1,110 yards) on the left wing, where the Ei-ho valley gradually narrows. The tactical value of these heights, however, was marred by the fact that the formation of the various knolls made it difficult to keep the Infantry positions separate from those of the Artillery. The fire trenches had to be constructed almost close in front of the gun emplacements, and therefore suffered alike with the Russian batteries from the fire which the enemy's Artillery directed against these batteries. As, moreover, there were no lateral communications in the positions, nor any from front to rear, and as the slopes towards the west, too, were difficult of access, especially for vehicles, the uniform control of the fight in the position was rendered difficult, and the timely withdrawal of the Artillery in case of retreat jeopardised. And further, the hard, rocky ground, covered with rubble-stones, was bound to prove disadvantageous in action, as it would

increase the effect of the enemy's projectiles by splinters.

The country in rear of the position is similar in character to that of the position itself. It is mountainous, with narrow valleys and abruptly rising heights. The numerous heights are so far favourable to a retreat, as they afford plenty of rallying positions, and facilitate a withdrawal under cover.

Although the Russians had their outposts on the Ya-lu since the middle of February, and also expected from the outset to fight here their first actions, very little had been done to strengthen this extensive position artificially. Apart from the heights of An-tung, which had been prepared for deliberate defence but were not attacked, the General Commanding had contented himself with ordering the construction of gun emplacements and trenches. Most of the fire trenches could only be used for firing kneeling; they had no overhead cover, no communicating trenches, nor any other improvements. The construction of obstacles in front of the position, which would surely have rendered excellent service, was also abandoned.

The cause of this neglect was to some extent, perhaps, due to the severe frost which still prevailed in March and at the beginning of April. Want of workmen, too, was a further cause; because a great portion of the available men were claimed for improving the main line of communication, leading to the rear by Fön-huan-tschön. Nevertheless, there is no doubt that more could have been done.

The crossing of the Japanese Guard and 2nd Division during the night of April 30 to May 1 did not remain entirely unknown to the Russians. Colonel Gromow, who was commanding on the heights of Po-tö-tyn-sa, reported to Major-General Kaschtalinski, at 11.50 p.m., that he had heard the rattling of wheels in the direction above the Tiger Hill, and also the dull rhythmical sounds of troops crossing bridges. When Colonel Gromow reported this he asked at the same time for reinforcements for his Artillery. General Kaschtalinski promised to send the machine-gun company to enfilade the main ford of the Ei-ho, if danger was threatening.

Colonel Zibulski, too, the Commander of the 12th Rifle Regiment, had his misgivings for the coming day. He personally interviewed Kaschtalinski, and urged that his troops were unable to sustain again the howitzer fire of the Japanese on the next day; that, moreover, the assault of the superior enemy was undoubtedly to be expected, and that he could not guarantee an orderly withdrawal from the position.

As General Kaschtalinski thought he was not entitled to decide the question personally, whether the impending attack of the Japanese was to be accepted in the position on the Ei-ho or not, he applied to the Commander of the Eastern Detachment, Lieutenant-General Sassulitsch, who was at San-tschen. In a lengthy telegram he first described the progress of the Japanese bombardment, and expressed his opinion that on the next morning chiefly the shelter-trenches would be taken under Artillery fire. "Under these con-

ditions," he then continued, "the detachment will play a passive rôle and suffer losses, the extent of which it is difficult to estimate beforehand. In agreement with the opinion of one of the section commanders, I would propose a timely occupation of the heights behind Tiu-ren-tschin; some outposts should be left in the foremost line, who would have to retire at daybreak. I do not touch upon the strategic situation, as that is better known to your Excellency than to myself. The 2nd Battery has suffered severe loss, and was silenced within fifteen minutes. I beg for orders without delay."

In reply, a telegram arrived from the Chief of the Staff of the Eastern Detachment: "The Commander of the Detachment has ordered that the troops are not to leave the position which they are occupying; only in the case of a renewed bombardment may portions withdraw into cover to the next height in rear, leaving behind some outposts, but in no case must they retire altogether."

At 3 a.m. Major-General Kaschtalinski received another report, confirming the crossing of strong forces over a bridge at Syn-dia-gou. There could be thus no longer any doubt that the Russians would find the Japanese fully deployed opposite their position at daybreak.

On the morning of May 1 the Russian troops were distributed as follows:

Russian disposition on the morning of the 1st of May.

On the right the village of Tiu-ren-tschin and the heights south of it were occupied by the 5th, 6th, 8th Companies, and the mounted scouts of the 11th Rifle Regiment, as well as by the mounted scouts of the 12th and the 8th Company

of the 24th Rifle Regiment, under the command of Lieutenant-Colonel Jablotschin of the 11th Rifle Regiment; the 6th Company of the 11th and the 8th Company of the 24th Rifle Regiment, as well as the mounted scouts, were in fire trenches in the first line. The 2nd Battery of the 6th Rifle Artillery Brigade had, in addition, prepared here another position, after it had, by order, left its former at dusk on the 30th. Sketch 5.

Colonel Zibulski's group was in prolongation to the north; he had occupied the Telegraph Hill and the knolls adjoining to the south with the 2nd, 3rd, 4th, 6th, 9th, and 12th Companies of his (the 12th) Rifle Regiment. The fire trenches constructed for these companies extended 1·5 kilometres (1,660 yards); behind them in reserve, on the western slopes of the hill, were the 7th and 8th Companies of the same regiment.

The 1st, 5th, 10th, 11th Companies of the 12th Rifle Regiment, and the machine-gun company, were placed as a general reserve for these two sections at the junctions of the roads from Ten-sy, Po-tö-tyn-sa, and Tiu-ren-tschin.

A number of companies of the 22nd Rifle Regiment were next placed on the heights of Po-tö-tyn-sa, without directly connecting with Colonel Zibulski's detachment. The 10th and 11th Companies were in fire trenches on the eastern slope, and in support behind the heights were the 5th, 6th, 7th, 8th, and 9th Companies. There were also still six guns of the 3rd Battery of the 6th Rifle Artillery Brigade which had not changed their position. To the north of these units, which were

under the command of Lieutenant-Colonel Pokotilo, was the garrison of the next hill, namely, the 12th Company of the 22nd and the 7th Company of the 11th Rifle Regiment, under Lieutenant-Colonel Gornitzki. The commanders of both these northern sections were jointly placed under the orders of Colonel Gromow, the commander of the 22nd Regiment.

The 1st Battalion of the 22nd Rifle Regiment, with two guns of the 3rd Battery of the 6th Rifle Artillery Brigade, was stationed at Tschin-gou to protect the left flank.

Apart from this last and isolated detachment, the Russians at Tiu-ren-tschin were thus disposed in two distinct groups, separated from each other by a gap of 1·5 kilometres (1,660 yards), and apparently unable to support each other by fire.

The Eastern Detachment's General Reserve (the 9th Rifle Regiment, two battalions of the 11th Rifle Regiment, the 3rd Battery of the 3rd Rifle Artillery Brigade, and two companies of Sappers) was still at Ten-sy, whence it would hardly be able to be in time for action at Tiu-ren-tschin, and not at all at Po-tö-tyn-sa.

As General Sassulitsch felt bound to oppose the Japanese attack, it was a great drawback that a number of other troops belonging to the Eastern Detachment were not available on May 1. The 21st Rifle Regiment, with a battery of the 6th Rifle Artillery Brigade, was at Da-gu-schan, and formed a support here for General Mischtschenko's Cossack Brigade. The 23rd Rifle Regiment was still on the march from Liao-yan to Sai-ma-tsy.

Of the 4th Batteries of the 3rd and 6th Rifle Artillery Brigades, half a battery of the 6th Brigade was marching on Kuan-dian-san, while the remainder was advancing on Fön-huan-tschön. Various companies had been detached as working parties for the " positions " in rear, or for mending roads.

Of the 25,000 men[1] of the Eastern Detachment, General Sassulitsch had in this way managed to have but, roughly, 6,000 men on the Ei-ho.

[1] Not counting those portions which were still on the march from Liao-yan.

VI

THE ACTION ON THE YA-LU ON MAY 1, 1904.

Commencement of the Japanese attack.

EARLY on the morning of May 1, the Russians awaited the attack of the enemy in their position. General Sassulitsch was with his Staff on the Telegraph Hill watching the flat, wide valley of the Ya-lu, which was still enshrouded in the mist. On the long-extended islands no life whatever seemed to exist. Clearly above the mist rose the well-defined features of the Tiger Hill, and as the light was gradually growing the contours of the rugged heights of Hu-san came distinctly into view as well.

A few companies of the 12th Regiment had been advanced for the night close to the banks of the Ei-ho, so as to notice and report as early as possible any offensive movement by the enemy. These companies had sent to General Kaschtalinski several reports, which spoke about the lively stir on the Japanese side. But in the early morning all was again perfectly quiet. As day began to dawn these companies withdrew again by order, and took cover in their fire trenches.

It was just five o'clock; then suddenly there

were flashes like lightning in the brushwood on the Ya-lu islands, and directly afterwards the thunder from more than fifty guns rolled over the wide valley; the batteries of the 2nd Division and the heavy howitzers had opened the fight in the first light of the morning with a salvo. Not a soul stirred in the Russian position. Experience on the previous day had taught that entering upon an Artillery duel would mean the speedy annihilation of the few Russian guns. General Kaschtalinski had, therefore, ordered the batteries not to fire, and not to show themselves to the enemy. The Japanese were almost inclined to think that the enemy had withdrawn during the night. Towards 5.30 a.m. the Artillery of the Guard and 12th Division opened fire too, without the Russians replying to it.

At 7 a.m. the Japanese began their forward movement. The deployment of a firing line with one or two paces interval was carried out as prescribed by the Regulations, which had been modelled after the German; the companies, however, did not retain any supports, but extended at once their three sections. The 12th Division had Sketch 5. in first line two battalions of each of the 47th and 24th, as well as a battalion of the 46th Regiment; the other battalions of these regiments followed in second line. Its Reserve, formed by the 14th Regiment and the Engineer Company, followed behind the right wing at a distance of 1,200 metres (1,330 yards) from the firing line. The Artillery fired from their position on the eastern bank of the Ei-ho. The deployment of the Guard and

2nd Division had been made in a manner similar to that of the 12th Division.

When the firing lines were approaching to within 200 to 300 metres (220 to 330 yards) of the Ei-ho, the Russian fire trenches became suddenly alive. Heads rose above the parapets, and soon afterwards the first volleys crashed forth. The distance was still about 1,000 metres (1,110 yards), the effect, therefore, not very great for the moment. A battery, too, appeared again north of Ma-gu, and joined in the fight, but was soon silenced by superior Japanese Artillery.

The Japanese Commander-in-Chief and his Staff, who at daybreak had been on the Gen-ka-do, moved, towards 8.30, to the Artillery position of the Guard Division. Telegraphic connection had been established with the divisions; the Commander-in-Chief communicated with the General Reserve by flag-signalling; in a similar manner was intercourse established between the divisions and brigades, as well as between brigades and regiments.

The Japanese ford the Ei-ho.

At 8 a.m. orders were issued to assault the Russian position.

Covered by Artillery fire the Japanese firing lines gained ground by long rushes. When they had arrived within 700 to 800 metres (890 yards) range from the enemy's position they opened fire. The fording of the Ei-ho with its flat banks proved very costly. The water reached in many places up to the men's hips, and in some even up to their chests. The fording of the river, therefore, in spite of its average small breadth, caused some

delay, which the Russians took successful advantage of. Particularly on the left wing of the Army, with the 2nd Division, and here especially with the 16th Infantry Regiment, whose share it was to attack over a perfectly level sandy plain without any cover, the losses were very great during the passage.

General Sassulitsch determines to withdraw his centre and left wing behind the Han-tu-cho-dsy.

Having obtained a general view of the Japanese advance, Lieutenant-General Sassulitsch rode with his Staff to the position of the 11th Rifle Regiment, and there entered into conversation with General Kaschtalinski. Seeing the enemy's masses streaming forward on a broad front, it was plain that he was in overwhelming force; there could be no doubt whatever now, that the Japanese would be successful. General Sassulitsch saw that to stay longer in the position would only entail unnecessary loss, without gaining any adequate advantage for the general strategic situation. He therefore ordered the gradual evacuation of the position on the Ei-ho. The machine-gun company and the 2nd Battery of the 6th Rifle Artillery Brigade were told to move off at once, and facilitate the withdrawal of the Tiu-ren-tschin group by taking up a rallying position on the western bank of the Han-tu-cho-dsy. The enemy was to be opposed again on the Han-tu-cho-dsy brook.

In order to have fresh forces in the second position, Lieutenant-General Sassulitsch sent a Captain of the General Staff to Ten-sy, with orders to send to that position both battalions of the 11th Rifle Regiment, and the 3rd Battery of the

3rd Rifle Artillery Brigade. He himself then went to Ten-sy a few minutes before nine, with the object of regulating the withdrawal of the Eastern Detachment's remaining portions.

Further progress of the Japanese attack.

It had been the intention of the Japanese Headquarters to attack the Russian position frontally, with the Guard and 2nd Division, and to make an enveloping attack with the 12th Division on the Russian left, this division to close with the enemy first. But the attack was, in fact, merely a frontal attack, since the Russian left wing reached with its extreme portions as far as Tschin-gou. Nor did the 12th Division attack first; it was the 2nd which did so. The reason for this must be sought in the latter division endeavouring to cross the perfectly level field of attack apportioned to it as rapidly as possible to lessen the losses. Moreover, the Commander of that Division at first cherished the belief that the enemy had gone. The Guard and 12th Division seem to have proceeded somewhat more cautiously, especially at first; probably they were also delayed by Russian Artillery fire.

Meanwhile the attack made further progress. After fording the Ei-ho the firing line advanced against the heights, with the object of forcing the enemy from his position at the point of the bayonet. But as the Russians had generally begun to retire when the Japanese came to within 400 metres (440 yards), there was no need to drive the attack home, except at a few places only. A violent and close fight occurred at the Telegraph Hill and at Tiu-ren-tschin village. Colonel

Zibulski's companies offered a determined resistance to the rush of the Japanese belonging to the 16th and 29th Regiments, and decimated their ranks by fire at the closest range; but they had finally to give way to superior numbers, and join in the general retreat.

Soon after nine the whole of the Russian position was in the hands of the Japanese. The Russians withdrew in two groups in an easterly direction.

Simultaneously with the order to attack, orders were sent to the General Reserve too, at 8 a.m., to move forward in the direction of the Telegraph Hill; two batteries of the 2nd Division were sent to reinforce it. In order to join the Reserve, these batteries had to drive through the Ei-ho, the waters of which reached up to the barrels of the guns. The construction of a bridge,[1] 34 metres (38 yards) long, was at once started to allow the Guard Artillery being brought forward into the Russian position. The howitzers remained in their original position, whence they had swept by their fire the country behind the enemy's position during the whole time it had been attacked.

The Japanese halt in the position captured in the Russian centre.

When the Japanese saw they were masters of the enemy's position, an exuberant joy seized them over the easily gained victory in their first passage at arms with a European Power. Officers and men were so flushed with victory, that no one thought of pursuing and making victory complete thereby. Exhaustion from previous hard work and night marches may have been in part the cause of this omission; at any rate, after 9 o'clock, a pause

[1] Bridge "i," on Sketch 5.

occurred in the Japanese movements which lasted till about 1 o'clock, and was in no way intended by Headquarters. The Russians thereby gained time to withdraw unmolested into their second position. If they had made still better use of this Japanese halt, they could have escaped the enemy's pursuit altogether by a rapid retreat.

Action on the Russian left wing.

Against the northern section, too, where Colonel Gromow was in command, the Japanese had advanced with greatly superior numbers. Already on the previous night the mounted scouts of the 10th Rifle Regiment had recrossed the river by an order from Lieutenant-Colonel Linda, as they were no longer able to hold their own on the left bank of the Ei-ho. Colonel Gromow had, therefore, sent the 5th Company of the 22nd Rifle Regiment from his reserve to his left flank, so as to watch and prevent any attempt by the Japanese to cross the Ei-ho west of Ka-rei-ro-ko, and get thus in flank and rear of the position at Po-tö-tyn-sa.

When the action had begun on the morning of May 1, and the enemy's firing lines were advancing in front, and when the fire of the batteries of the 12th and Guard Division had smothered the Russian Battery south-east of Po-tö-tyn-sa, Colonel Gromow heard a lively fusillade in the direction of where he had sent the 5th Company of the 22nd Rifle Regiment. Soon afterwards the report arrived that strong forces of the enemy's Infantry were advancing on their left flank. Colonel Gromow then ascertained by personal observation that, at a distance of about 1·5 kilometres

(1,660 yards), long dark lines of hostile Infantry were descending in a north-westerly direction from the heights on the left bank of the Ei-ho. From the extent of this firing line he gained the conviction that the enemy was advancing there in stronger force than in front, and apparently trying to strike the main blow against the *left* flank of his position.

As the 5th Company of the 22nd Rifle Regiment was not in a position to prevent this enveloping movement by the enemy, Colonel Gromow ordered the company to withdraw; he resolved, moreover, to occupy another position with his troops, so as to meet more effectively the enemy's wide turning movement. He, therefore, went back to his reserve, and ordered the Commander to occupy, with his companies, the heights south-east of Tschin-gou.

When these arrangements had been made, the Commander of the 3rd Battery of the 6th Rifle Artillery Brigade, Lieutenant-Colonel Pokotilo, appeared and pointed out that, in his opinion, it was time to begin the retreat, as otherwise his guns would be lost. At the same time he reported that an enveloping movement of the Japanese was clearly discernible against the *right* flank.

These events were enacted towards 9 a.m. In the southern section of the Ei-ho position at Tiuren-tschin, General Kaschtalinski had already issued the orders for a retreat at the instance of Lieutenant-General Sassulitsch. Colonel Gromow, however, had not yet received an order to that effect; he, therefore, acted on his own responsibility. As there was apparently no proper con-

nection established between both defensive groups, and as Colonel Gromow did not send reports in time[1] to his superior officer about his measures, General Kaschtalinski did not hear anything of the completely altered situation until their consequences had become fatally apparent.

Colonel Gromow meanwhile made dispositions for the various portions of his section. The battery to which two companies of Infantry were assigned as escort, received orders to limber up and move off. The vehicles of the dressing-station, as well as the field kitchens, were already on the move. Having also disposed of the companies of his section in detail, Colonel Gromow rode on to the new position and awaited the arrival of the guns. The battery, however, did not drive off to Tschin-gou, but in the direction of Tiu-ren-tschin; the commander was probably not in a position, for some reason or other, to comply with the order. The battery was lost; it got on to a precipitous road, enclosed by abrupt slopes, on which it could move neither forward nor backward, and here fell an easy prey to the Japanese. When the commander of the battery saw no longer any chance of saving the guns, he ordered the gun-detachments, or what had remained of them, to take flight into the mountains on the horses that were still of any use. The guns had first been disabled as much as possible. Besides the battery, two companies were also missing, which afterwards

[1] The first report sent by Colonel Gromow to General Kaschtalinski was despatched by him at 12.15 p.m.; at a time, therefore, when his detachment had already evacuated the road defile north of Lau-fan-gou. The report reached General Kaschtalinski at 4 p.m.

cut their way through in a westerly direction, being favoured in this by the mountainous and much-broken character of the country.

When Colonel Gromow saw strong firing lines advancing in a direction bearing on the position he wanted to occupy, doubts arose in his mind whether all his troops, exhausted as they were already, would be able to reach it in time; when he, moreover, noticed that the enemy was also advancing in considerable force in the direction of Ma-gu, he became convinced that it would be altogether useless to attempt to occupy this newly selected position. He therefore resolved to retire with his whole detachment along the road leading to Tschin-gou. Meanwhile the wide turning movement of the Japanese to the north-west made rapid progress, whilst the withdrawal of the Russians proceeded only very slowly in the difficult country, where they were, moreover, delayed by the transport of their wounded. As there was thus the likely danger that the Japanese would be on the road to Tschin-gou sooner than he could get to that village, Colonel Gromow gave up the idea of reaching it and ordered the companies to turn straight to the west, with the object of gaining the road leading from Tschin-gou to Lau-fan-gou. The road defile there, 1·5 kilometres (1,660 yards) south of Tschin-gou, was to be barred by the occupation of the surrounding heights; the Tschin-gou Detachment, the 1st Battalion of the 22nd Rifle Regiment, with two guns, would thus be able to withdraw under cover of this rallying position. With this object in view the withdrawal of the

Russians from the Po-tö-tyn-sa position was carried out to the west, across country over the saddle between the two heights numbered "353" and "365."

It was 11.30 when this movement had been completed; and it was only now that Colonel Gromow received the written order, signed by Lieutenant-Colonel Linda: "When you are going to withdraw, then decidedly on Tschin-gou."

Colonel Gromow could indeed no longer have reached Tschin-gou village in time, for when the last company of the 22nd Rifle Regiment arrived at the road defile, the Japanese had already occupied the village and pushed forward skirmishers in a southerly direction along the road to Lau-fan-gou. The Tschin-gou detachment retired before them. When the Japanese skirmishers were approaching the road defile, they were met by a hot rifle fire from the neighbouring heights, which obliged them to open fire too. A short time afterwards, however, the Russian fire died away. Colonel Gromow seemed to have grown anxious for his left flank, and had therefore withdrawn his companies one after the other. He first followed the road from Tschin-gou as far as the cross roads north of Lau-fan-gou, and then took the road to Liu-schi-gou. Later on the detachment placed itself on the main line of communication, leading from Tan-san-tschyn-dsa to Fön-huan-tschön.

The pause made by the Japanese Army after capturing the enemy's position seems to have affected only part of the 12th Division, for while

the forward movement of the Guard and 2nd Divisions (the latter on An-tung) was resumed only about 1 p.m., considerable forces of the 12th Division kept continually advancing, and by their wide turning movement to the north, caused Colonel Gromow to evacuate his position at Po-tö-tyn-sa, and then to withdraw altogether. The General Reserve, which had meanwhile arrived, was deployed on both sides of the road from Tiu-ren-tschin to Ha-ma-tan.

The 12th Japanese Division partially continues its advance, the Guard and 2nd Divisions renew their advance.

The Russians withdrew from position to position. As Gromow's troops, which were facing the 12th Division, had, in the neighbourhood of Lau-fan-gou, disappeared in the mountains to the west, the 2nd Battalion of the 24th Regiment of that division, leading in front, took from Tschin-gou a southerly direction. The 5th Company had somewhat hurried forward, all by itself. When, towards 2 p.m., it was approaching the village of Ha-ma-tan, it encountered a long, hostile column of Infantry and Artillery retreating, and intermingled with all kinds of vehicles. The company at once opened fire, and thereby created great confusion in the column. But when superior Russian Infantry rapidly deployed against them, the isolated company soon found itself in a very tight corner. Within a short time all its officers, with the exception of one lieutenant, and a great portion of the men, were killed. In the end the company was without ammunition, and obliged to remain helpless, lying down under the hottest fire possible, until at last the other companies of the battalion arrived, and brought relief

to the 5th Company.[1] Somewhat later, portions of the 46th Regiment also took part in the action, whilst from the east and north-east the main body of the General Reserve and a battalion of the 3rd Guard Regiment advanced against height "192," on which the Russians had meanwhile again established themselves. Up to the time when the obstinate fighting began in the neighbourhood of Ha-ma-tan, which forms the final act of the events on May 1, the following had occurred on the Russian side:

The combat at Ha-ma-tan.

When the machine-gun company and the 2nd Battery of the 6th Rifle Artillery Brigade had moved off to the position in rear behind the Han-tu-cho-dsy brook, and there had taken up their new position, the remaining portions of the southern group gradually also evacuated the heights on the right bank of the Ei-ho. Three companies of the 12th Regiment faced about again on the western bank of the Han-tu-cho-dsy as escort to the Artillery and machine guns, three more companies took post behind them in reserve. The other companies of the 12th Regiment, as well as the 5th and 6th Company of the 11th, and the 8th Company of the 24th Regiment slowly retired on the road to Ten-sy, bringing in with them numerous wounded.

Behind the retreating portions of the 12th

[1] The sources available for a description of what occurred on the Russian side do not take much notice of this episode; it cannot, therefore, be ascertained for certain, what column was stopped by the 5th Company of the 24th Regiment, but they were probably portions of the 12th Regiment, which were retiring west from the Han-tu-cho-dsy brook.

Regiment, Japanese skirmishing lines descended after a considerable time from the ridge of the heights which the Russians had abandoned, and were followed by bodies in close order. The fire of the 2nd Battery of the 6th Rifle Artillery Brigade had, however, some good effect, and prevented the enemy from crossing the brook; an attempt, too, of Japanese batteries to unlimber opposite the new position failed. But not long afterwards, an enveloping movement of the enemy made itself felt on the flank. This movement could be executed the more readily as Colonel Gromow's northern group had already withdrawn, and as there was thus no danger threatening rear and flank of the Japanese. This was the reason why the position behind the Han-tu-cho-dsy brook had soon to be given up again.

General Kaschtalinski had, meanwhile, ridden back with the object of selecting a suitable position for the battalions of the 11th Rifle Regiment, which were coming up from Ten-sy. On this ride, it was towards twelve noon, he met a surgeon belonging to the 6th Rifle Division, who told him that the 22nd Regiment had evacuated the Po-tö-tyn-sa position as well as the village of Tschin-gou; that the regiment was retiring in disorder, the battery attached to it had fallen into the hands of the enemy, the colours had apparently been lost, and that the Japanese had already occupied Liu-schi-gou. Shortly afterwards the surgeon's report was supplemented by another intelligence, which stated that a Japanese Infantry column, about a regiment strong, and followed by

some squadrons, was advancing from Tschin-gou on Lau-fan-gou. It was therefore high time for the troops on the Han-tu-cho-dsy brook to withdraw, if they did not wish to be cut off completely. The 11th Rifle Regiment, with the 3rd Battery of the 3rd Rifle Artillery Brigade, had meanwhile marched from Ten-sy, *viâ* Ha-ma-tan, and had arrived as far as the hollow road south of height "192." General Kaschtalinski gave orders to Colonel Laiming, commander of the regiment, to occupy that height as a rallying position. By personal reconnaissance, he then convinced himself that the road from Lau-fan-gou was already being enfiladed by the enemy's fire. Meeting here unexpectedly the 11th Company of the 22nd Regiment, one of the two companies which had been lost in the retreat from Po-tö-tyn-sa, he caused it to occupy the height "192" and to face north, so as to guard the 11th Regiment against being enveloped.

The position on the Han-tu-cho-dsy brook was meanwhile being evacuated. First the companies in reserve retired; next followed the machine-gun detachment and the 2nd Battery of the 6th Rifle Artillery Brigade, which were joined by the other companies of the 12th Regiment. The 5th Company was to follow as rear guard, and had orders to hold its ground to the last, so as to make it possible for the Artillery to retire. Towards 3 p.m. the regiment, which had avoided the road south of height "192," arrived in the neighbourhood of Ten-sy. As the Japanese coming up from Tschin-gou had already deployed, and initiated to some extent a wide turning movement to the west,

the village was not reached without some fighting. They succeeded, however, in pushing back the enemy's weak parties, that had already occupied the heights north of the road by which they were marching, the regiment thus arriving at Ten-sy without any appreciable delay. But the companies were so reduced in numbers, owing to the loss they had suffered in the course of the day, that the regiment was organised into six companies at Ten-sy before it retired, by order of Lieutenant-General Sassulitsch, further back on Fön-huan-tschön.

When General Kaschtalinski had directed the 11th Rifle Regiment to occupy height "192," he ordered the 3rd Battery of the 3rd Rifle Brigade at the same time to go rapidly back to the reserve, in consideration of the fact that the Japanese from Lau-fan-gou had already advanced so far, that the cross roads at Ha-ma-tan were under their fire. But this movement of the battery was no longer feasible. When the battery commander had received the order to retire, he left a section behind, south of the road at Suan-schan-sa, with orders to cover the withdrawal. He then sent the eight ammunition waggons ahead, which safely crossed the dangerous zone at a gallop. From the six guns which were to follow now, another section was detached, which came into action behind the north-western slopes of height "192," so as to facilitate the departure of the rest of the battery. These four guns, however, came under such a hot fire at the cross roads, that in an exceedingly short time a portion of the teams broke down and rendered any further movement impossible. No other

choice was left to the battery but to unlimber and take up the fire. The enemy, however, had already approached to within 600 metres (665 yards). The position of the battery became an exceedingly difficult one. In a few minutes the gun detachments were shot down almost to a man; as the ammunition waggons had gone ahead, there was want of ammunition; finally the battery had to cease fire altogether. In order not to expose the rest of the men and teams to complete annihilation by the enemy's fire, the battery commander ordered the guns to be disabled, and the gunners, with the horses that were still sound, to join the section which was left behind to the west of height "192" and was still able to fire.

Shortly after 2 o'clock these two guns were reinforced by the 2nd Battery of the 6th Rifle Artillery Brigade, which had vainly endeavoured to avoid the neighbourhood of Ha-ma-tan when retiring from its position on the Han-tu-cho-dsy brook. The battery, under the guidance of Lieutenant-Colonel Linda, had got on to a precipitous road, forcing it to turn back. He then joined the remnants of the 3rd Battery of the 3rd Rifle Artillery Brigade and opened fire.

Sketch 6. Towards 3 o'clock the situation east of Ha-ma-tan was somewhat as follows: The 1st Battalion of the 11th and the 11th Company of the 22nd Rifle Regiment, had occupied height "192," as well as its lower features[1]; the 3rd Battalion was

[1] Some accounts say that the 11th Company of the 22nd Rifle Regiment did not comply with General Kaschtalinski's orders to occupy height "192," but that it continued its retreat without delay in a westerly direction.

in reserve on the southern slopes. South of the height, on a small hillock at Suan-schan-sa, was a section of the 3rd Battery of the 3rd Rifle Artillery Brigade, escorted by half the 3rd Company of the 11th Regiment; these guns were to cover the rear of the 11th Regiment until disabled. Behind the western position of height "192" were six guns of the 3rd Battery, of which two only were still in action; in prolongation of that battery the 2nd Battery of the 6th Rifle Artillery Brigade had unlimbered, which on the previous day had lost one gun, but was now keeping up the fire still with seven guns. As the guns had, owing to difficulties of ground, to be brought into action on the slope facing the enemy, they were particularly exposed to the enemy's fire. Not far from the Artillery was also the machine gun company, which had shared a fate similar to that of the 3rd Battery of the 3rd Rifle Artillery Brigade. As it had not succeeded in getting over the pass at Ha-ma-tan, which was under the enemy's fire, its commander promptly decided to join and fight together with the Artillery. The 8th Company of the 11th Rifle Regiment formed the escort of the guns and machine guns.

The Japanese at this time gained more and more ground. In the north-east, east and south-east, firing lines appeared, which established connection with the forces, pushing on from Tschin-gou, thus gradually drawing the ring tighter and tighter around height "192." The Russians, surrounded as they were, suffered extraordinary loss, under the heavy cross fire. There was only one

gap by which escape was possible in a westerly direction. As this last exit was sure to be barred in a short time—for the enemy was coming more and more round to the west—Colonel Laiming resolved to cut his way through there at the point of the bayonet. He assigned this task to the 3rd Battalion of his regiment, that was still available, and had only recently arrived from home. Behind the battalion stepped the band, the 1st Company with the colours and a number of men who had to carry or support the wounded. The priest, having blessed the battalion, stepped forth with the cross raised high above his head. With bayonets fixed and the band playing, the battalion advanced, led on by the Commander of the regiment. At every step some men broke down under the hot fire, dead or wounded; one of the first to fall was the Commander of the regiment, Colonel Laiming; the priest, too, was wounded. This determined attack, however, did not fail in its moral effect, the Japanese gave way and left the road open. The remnants of the battalion gained the main line of communication without any further fighting.

With the object of supporting the 3rd battalion of the 11th Regiment in its effort to break through, all guns that were not yet disabled fired with the utmost exertion, but the batteries, as well as the marksmen, had come to the end of their powers of resistance. Together with want of ammunition, the utmost exhaustion set in. When the Japanese Artillery also began to fire into his cock-pit, conviction was forced upon the

Russians that further fighting would be useless, and merely increase the losses. Moreover, the machine-gun company, from want of ammunition, had been obliged to cease fire altogether; the fire from the guns, too, was continually losing in strength, as the gun detachments had been reduced to a mere fraction. Of the horses, the majority was struck down; withdrawing the guns from their fire positions could, therefore, no longer be thought of. In order not to fall into the hands of the enemy as prisoners, the surviving officers determined to break through to the west, into the mountains, with the rest of the men. The remnants of the firing lines, too, gradually withdrew. Portions of them succeeded in reaching the main line of communication through the door opened by the 3rd Battalion, and joining afterwards the main forces of the Eastern Detachment in their retreat. But large numbers probably did no longer find their way out, and were obliged to lay down their arms. The 12th Regiment also seems to have left behind numerous prisoners.[1]

The 11th Rifle Regiment and the 3rd Battery of the 3rd Rifle Artillery Brigade had to suffer in the first instance from the conduct of the 22nd Regiment. Though no blame can be attached to Colonel Gromow for evacuating, without orders, the position on the Ei-ho in the face of overwhelming odds, his resolve, to withdraw altogether without any further notice, can in no way be approved, for the left flank of the

[1] Most of those, however, who fell into the hands of the enemy were wounded.

southern group was thereby completely laid open. If the 22nd Regiment had delayed the Japanese, who were pushing forward, some time longer in the neighbourhood of Lau-fan-gou, which it undoubtedly could have done, the combat at Ha-ma-tan would probably not have ended for the Russians in this tragic manner.

Withdrawal of the An-tung detachment and of the remainder of the Russian troops.

Lieutenant-General Sassulitsch's order to evacuate the position, had reached the An-tung Detachment at 9.30 a.m. Here were 2½ Battalions of the 10th Rifle Regiment, 2 companies of the 24th Regiment, the detachments of mounted scouts of the 9th, 10th, and 11th Regiments, and the 1st and 2nd Battery of the 3rd Rifle Artillery Brigade. The apprehension which led to the disposition of these forces on the right wing had been groundless. But the Japanese had certainly known how to keep their enemies to the very last in their belief that landings in the neighbourhood of the Ya-lu were contemplated.

Sketch 5.

This was the object of Nakagawa's flotilla, too, when it showed some activity opposite the An-tung detachment. On April 30, the day of the Tiuren-tschin bombardment, a few ships detached from the Hosoya squadron appeared before An-tung, and began bombarding the fortifications, without any result, however. The Russian Artillery apparently did not reply with their fire. About half an hour afterwards the ships withdrew again. Also on the following day some Japanese gunboats, probably the same as on April 30, steamed up the Ya-lu, and fired on the Russian positions. The 2nd Battery of the 3rd Rifle Artillery Brigade

took up the fight; the combat having lasted for a short time without causing any effect whatever, the ships steamed seaward again.

The An-tung detachment took no further part in the events of April 30 and May 1. Towards twelve noon, Colonel Schwerin, commanding at An-tung, began to withdraw with his column by Ten-sy on Fön-huan-tschön, after he had called in all his posts, small detached parties, etc. On the march thither, a second order from Lieutenant-General Sassulitch arrived, charging Colonel Schwerin to command the rear guard of the Eastern Detachment. Before Ten-sy was reached, the 9th Rifle Regiment had joined the column, the rear-party of which was formed by the 2nd Battalion of the 10th Rifle Regiment. In the country west of Ha-ma-tan, other portions of the Eastern Detachment joined Colonel Schwerin's column by degrees, and swelled it to a considerable size; they were companies of the 22nd, 11th, and 12th Rifle Regiments, individual batteries, ammunition waggons, and vehicles. As the Japanese were already nearing the main line of communication, three companies of the 2nd Battalion of the 10th Rifle Regiment, and a detachment of mounted scouts were sent towards the flank into the mountains, with the object of covering the withdrawal of the column. These companies held the Japanese for some considerable time at bay by their fire, and then followed by the main road supported by the 1st Battalion of the same regiment. Towards 5 p.m. the remnants of the 11th Regiment also reached the main line of communication by Ha-

ma-tan, and gradually got in contact with the main column. The 1st Battalion of the 10th Regiment took over the rear guard for the whole detachment.

March 2.

Darkness had set in before the column reached Tan-san-tschyn-dsa. Having rested here for two hours the column continued its march on Fön-huan-tschön. The Japanese did not press on, the march therefore proceeded unmolested. During May 2 the Russians reached Pia-myn, about 18 kilometres (11·25 miles) south of Fön-huan-tschön, the position there was occupied by the 9th and 10th Rifle Regiments, and a battery, the remainder continuing their march, and halting at Fön-huan-tschön. A company was at once pushed out to the Ei-ho, 10 kilometres (6·25 miles) distant from Fön-huan-tschön, in case the enemy should advance along the valley of that river. The other portions of the widely dispersed Eastern Detachment, had also commenced to retreat in a north-westerly direction, when the news of the result of the action on the Ya-lu had reached them.

General Mischtschenko had received through Colonel Schwerin the orders to retreat and had started with his Cossack regiments[1] from the neighbourhood of Da-gu-schan in the direction of Pia-myn. Colonel Letschitzki, who with five companies was at Hun-si-las, started thence on May 3, and arrived in the evening at Tschu-tsche-lin-tsy, a village situated east of Fön-huan-tschön

[1] *The 21st Regiment was instructed by Lieutenant-General Sassulitsch to retire on Sa-li-dsai-pu-dsa, or, if that was no longer possible, on Ai-tschön.*

on the left bank of the Ei-ho. Colonel Karzew's Cavalry concentrated at Kuan-dian-san.

When General Kuropatkin received Lieutenant-General Sassulitsch's despatch on the unfortunate result of the action of May 1, he was afraid the Japanese would make use of their success and energetically pursue; he therefore took measures on the evening of the same day for reinforcing the Eastern Detachment, and occupying the enemy's probable lines of advance: three squadrons of the 2nd Tschitinsk Cossack Regiment, which had departed from Liao-yan on April 29, received orders to join, by forced marches, the Eastern Detachment at Fön-huan-tschön; three companies of the 139th Marschansk Infantry Regiment were pushed to Lan-san-guan; a Battalion of the 23rd East Siberian Rifle Regiment, which had left Liao-yan, was also to arrive at Lan-san-guan on May 3. The other two battalions were told to be at Sai-ma-tsy by May 4.

Measures by Russian Supreme Headquarters after May 1.

General Kuropatkin further arranged for the formation of a detachment which was to assemble at Lan-san-guan, under the command of Major-General Romanow. Two battalions, three companies, and a battery and a half from various units, were told off for that purpose.[1] Major-General Rennenkampf received orders to proceed to Sai-ma-tsy, with two regiments of his Transbaikal Cossack Division and a Horse Artillery battery,

[1] They were the following units in detail: One battalion of the 124th Infantry Regiment, three companies of the 139th Regiment, one battalion of the 23rd Rifle Regiment, half 4th Battery of the 6th Rifle Artillery Brigade, and the 4th Battery of the 3rd Rifle Artillery Brigade.

with the object of securing the roads leading to Mukden from Fön-huan-tschön and east of it. Lastly, another brigade from the 35th Division, with three batteries, were pushed forward by
Sketch 3. General Kuropatkin as far as the country behind the Mo-du-lin and Fyn-siao-lin pass.

The Commander-in-Chief informed Lieutenant-General Sassulitsch by telegraph of these measures, and at the same time asked him to adopt stringent measures for the protection of his left flank.

Renewed rumours having been spread about of an intended landing of Japanese forces at Da-gu-schan, General Mischtschenko received orders during his march by Pia-myn on Fön-huan-tschön, to advance to Sali-dsai-pu-dsa, on the Da-yan-ho, with the object of watching thence the coast. In support of the Cossacks, the 18th Rifle Regiment was pushed from Hai-tschön to the Fyn-siao-lin (Da-ling) pass.

In the lively correspondence which General Kuropatkin was keeping up with the Commander of the Eastern Detachment, his apprehension for the security of the Detachment's left flank found also frequent expression. In one of his telegrams the Commander-in-Chief expressed the hope that the Eastern Detachment would surely have done everything to search for the wounded and to replace the vehicles which were lost during the retreat; "but more important than anything else," he then continues, "is it for you to know where the enemy is; whether he is not threatening to turn our left flank, and whether the Japanese are not advancing in the direction of Kuan-dian-san to Sai-ma-tsy."

On May 3 the 9th and 10th Rifle Regiments, with a battery, remained in the position at Pia-myn, which they fortified; while the 11th, 12th, and 22nd Regiments, with three companies of the 24th Regiment, took up a position at Fön-huan-tschön.

The Eastern Detachment withdraws into the mountains.

It seemed as if the enemy was not even following on May 3; a few patrols only were seen in the Ei-ho valley, and small bodies of Cavalry were feeling their way along the high road to Pia-myn. On the following day, however, General Sassulitsch gained the impression, from reports coming in, that the Japanese were continuing their advance on a wide front on Fön-huan-tschön. He therefore determined to evacuate the position of Pia-myn, to prevent his left flank being turned. Under cover of his cavalry he led his troops back behind the Mo-du-lin and western Fyn-siao-lin pass,[1] which had been prepared for defence at an earlier stage.

The Eastern Detachment remained in this position until early in June 1904.

The 1st Japanese Army at Fön-huan-tschön.

The 1st Japanese Army halted on the battlefield during the night of May 1-2; the 12th Division in the country west of Ha-ma-tan, the Guards east of that place, and the 2nd Division at An-tung—Headquarters going there, too, on the 2nd. The next days were spent with caring for the wounded and collecting all the material on the battlefield; the Cavalry alone followed the enemy on the 3rd. The Guard Cavalry Regiment advanced by the main road, and reached Pia-myn

[1] Half-way between Fön-huan-tschön and Liao-yan.

on the 4th, the Cavalry of the 2nd Division being pushed forward in the direction of Da-gu-schan.

The main body of the Army did not move until the 5th. The halt of several days after the victorious action on the Ya-lu is explained by the fact that Japanese Supreme Headquarters had given instructions not to advance for the present any further, after the river was crossed, so as not to be exposed to a sudden attack by superior forces, the approach of which from Liao-yan and Hai-tschön had been expected. The Commander-in-Chief of the 1st Army, however, saw that such a danger did not exist, and that, for future operations, it was highly important to occupy Fön-huan-tschön as soon as possible. He therefore ordered, on his own initiative, to advance as far as Fön-huan-tschön.

The 2nd Division started first, reaching Tan-san-tschyn-dsa on the 5th, and Pia-myn on the 6th, its advanced guard entering Fön-huan-tschön on the same day. The Guard Division left Ha-ma-tan on the 9th and also arrived in the neighbourhood of Fön-huan-tschön on the 10th, the main body of the 2nd Division having meanwhile closed up to that place. Finally, the 12th Division, too, arrived east of that town on the 10th. Headquarters reached Fön-huan-tschön on May 11.

The whole Army was billeted, the 12th Division east of Fön-huan-tschön, the 2nd and Guard Divisions north and south of the town, full use being made of all the billets available in the town itself.

With the ingenuity peculiar to the Japanese

soldiers, they knew how to make themselves comfortable in their quarters in the shortest possible time. As, in addition to the large and spacious town of Fön-huan-tschön, a number of well-to-do villages and fanses [1] were comprised in the billeting area, each private had his sleeping-place under shelter.[2] The Chinese dirt having been removed, the men with the simplest means created comforts to which they were accustomed; neat and clean mats were laid out, and in every habitation arrangements were made for hot baths, as well as for a kitchen. For the horses, plain sheds were built of poles, mats, and gaoljan, affording, by a roof, protection merely against slight rains, but being otherwise open on all sides. The roads in the villages and their neighbourhood were improved and provided with deep trenches to drain them during the rainy season. The men thus found occupation for some time. In addition there were drills and field days. Moreover, various small expeditions were initiated against the Russian out- Sketch 3.
posts on the main roads to Sai-ma-tsy, Liao-yan, Hai-tschön, and Siu-yan, which led to small skirmishes. As regards sanitation, measures were adopted to prevent the appearance of infectious diseases. The men, for instance, were allowed to drink only boiled water or tea; by sound and varying food it was hoped to keep off the much-

[1] Farms of peasants.

[2] The Japanese soldier, of course, is far less pretentious than the European; thus for instance a Kang (the raised couch for sleeping purposes along the wall in each Chinese room) of only a little over two square yards afforded sufficient accommodation for three men.

feared beri-beri malady.[1] Early in June the troops were provided with khaki coats, which were for all arms alike and made after the pattern of the tunic, showing no regimental badges whatever. The non-commissioned officers were distinguished by a narrow braid on both the lower sleeves.

Supplies were brought up chiefly by coolies along the main line of communication. Three to four men pulled or pushed a small cart, laden with five to six sacks of rice or packages of conserves, weighing about 15 kilograms (30 lb.) each. These carts were formed into columns with the requisite supervising staffs. The 1st Army employed 15,000 coolies, mostly Japanese, partly Koreans. In addition there were numerous columns composed of Chinese carts. These rather large vehicles were drawn by four to five animals, a mixture of horses, mules, and oxen, and they are said to have rendered excellent service, even in the rainy season. The system of supply was especially simple at Fönhuan-tschön, as the Japanese had found there a large Russian magazine, which, in addition to ammunition, clothing, and vehicles of all sorts, contained large stores of preserves and bread.[2]

The 2nd and 12th Divisions, which each formed three outpost sections, were responsible for the security of the cantonments against the enemy. In case of an attack by the enemy, a defensive position,

[1] A nervous disease combined with a strong swelling of the limbs commencing at the feet.

[2] The Japanese, however, are said to have disdained the Russian black bread.

about on a level with the outpost companies, was selected and carefully prepared for both divisions.

The 1st Army remained at Fön-huan-tschön until June 28.

Losses on April 30 and May 1, 1904

1. *Losses of the Japanese*

Division.	Officers.		Non-commissioned officers and men.		Remarks.
	Dead.	Wounded.	Dead.	Wounded.	
Guard . .	1	7	25	125	These numbers correspond with the statements made by the Japanese during the war.
2nd . .	1	14	90	313	
12th . .	3	8	48	232	
Total .	5	29	163	670	

2. *Losses of the Russians*

Unit.	Officers.			Non-commissioned officers and men.			Remarks.
	Dead.	Wounded.	Missing.	Dead.	Wounded.	Missing.	
10th East Siberian Rifle Regiment . . .	...	...	...	3	9	...	It must be understood that by "*missing*" are meant chiefly those who, mostly wounded, fell prisoners into the hands of the enemy.
11th East Siberian Rifle Regiment . . .	14	14	...	206	360	281	
12th East Siberian Rifle Regiment . . .	11	10	2	273	352	212	
22nd East Siberian Rifle Regiment . . .	...	4	...	23	152	31	
Machine-gun Company .	...	...	...	15	35	...	
3rd Battery 3rd East Siberian Rifle Artillery Brigade . . .	3	2	...	24	58	...	
2nd Battery 6th East Siberian Rifle Artillery Brigade . . .	2	1	...	32	39	...	
3rd Battery 6th East Siberian Rifle Artillery Brigade . . .	...	...	...	8	17	...	
Total . . .	30	31	2	584	1022	524	

By the Japanese were captured:

a. On the battle-field

21 guns,
19 ammunition waggons,
1417 projectiles of artillery,
8 machine-guns,
8 machine-gun ammunition waggons,
37,300 rounds for machine guns,
1021 rifles,
51 small-arm ammunition waggons,
353,000 rounds of rifle ammunition,
63 horses,
10 general service waggons,
694 great coats,
550 fur coats,
541 tente d'abri.

b. In Fön-huan-tschön

357 projectiles for 6·3 c.m. (2·52 inch) mountain guns,
188,000 rounds S. A. A.,
150 sets of A. S. C. harness,
1,720 great coats.

besides large stores of black bread, corn, beancake, preserves, as well as vehicles, entrenching tools, and telegraph material.

COMMENTS

THE first period of the Russo-Japanese war is characterised by the unfinished state of Russia's armaments, as compared with the readiness of Japan, which for years had prepared for the unavoidable struggle, and seized the opportunity of bringing it to a head when the balance of power by sea as well as on land was still in her favour.

Russia, to the surprise of the Japanese themselves, who had estimated that she would be unable to concentrate 150,000 men at Mukden before August 1904, had, nevertheless, managed to raise, in a considerably shorter time, a far stronger army in Manchuria, and to provide it with all that was wanted. What the Russians accomplished in organisation and administration with the aid of only a single, the Siberian, line of railway, which, moreover, was interrupted by Lake Baikal, is truly marvellous. In this way the evil of having been surprised by the war in a state of unreadiness, was entirely made good by degrees. The conditions for a successful conduct of the war by Russia did afterwards exist, if numbers are merely considered. The causes which led to nothing but misfortune must be looked for elsewhere.

Japan, having at first imagined her task to be much easier than it really was, must be complimented the more for not having recoiled before the increasing difficulties during the war; that these difficulties rather stimulated her people and army to face readily even the heaviest sacrifices in the cause of their fatherland. The execution of the task, by no means easy in itself, was certainly rendered less difficult for the Japanese Army, because compared with the Russian lines of communication, those of the Japanese were far more favourable. Whereas transports by rail needed six to seven weeks to move from the interior of Russia to the theatre of war, the journey to and fro of a Japanese échelon of naval transport occupied not more than a fortnight or three weeks. On this fact was probably based the original Russian plan to concentrate an Army in second line as far back as Charbin.

Reproach has been heard in the Russian Army that this original plan was abandoned. This is unjustified, for it would have been a great mistake to have adhered to it. It clearly shows the danger of generalising from examples in military history. That which was effectively used against Napoleon in 1812, when the government was supported by a loyal and self-sacrificing people, was bound to fail in this case. The offensive of the Japanese could never have been met successfully by a strategy of wearing out the enemy. War is never a thing by itself, and this war had for Russia an absolutely positive object as well, namely the maintenance of her hegemony in the Far East.

Methodically as the war was prepared by the Japanese, as methodically was it begun and carried through by them. The first step, the landing at Korea, was only followed by the second, the landing of the 2nd Army, when, after repeated damage inflicted on the enemy's Port Arthur squadron, and after the defeat of the Russians on the Ya-lu, the command of the sea and the possession of Korea seemed to be ensured. In their efforts to gain command of the sea as a *sine qua non* for the continuance of the war on the continent, the Japanese naval commanders in their national enthusiasm did not shrink back from any sacrifice.

If the Japanese underrated on the one hand the strength of the land forces, which they thought the enemy would be able to bring into Manchuria before the autumn 1904, they showed, on the other hand, great caution in reckoning that they would meet with strong resistance in Korea, and thus credited the Russians with a greater initiative than they actually possessed. Probably the fact that Korea had been one of the points at issue in the diplomatic negotiations, and was really of great value to the Russians, had something to do with it, and also that the great importance of Korea for Japan would be so much more an inducement for the Russians to prevent the enemy from establishing himself there; for it was Korea which gave the Japanese the safest line of communications with their home country. As a matter of fact the Russians could have been, on the Ya-lu at least, in considerably greater strength;

for the great difficulties which the 1st Japanese Army had to surmount on its march thither did not exist in equal measure for the Russians. That the Japanese did not land in Korea any other troops besides the 1st Army, although the sea route thither was the shortest of all, and they expected to come into collision with the Russians there, was again a correct appreciation of the general situation, and resulted from a correct knowledge of the theatre of war, the difficulties of which are of so serious a nature, that the chances of a Russian counter-offensive in strong force were very much reduced.

As on the Ya-lu, so also could the Russians have appeared in stronger force at the other threatened points of the East Asiatic continent. Landing in Korea being, moreover, a very difficult and tedious process, they could have considerably delayed, if not altogether prevented, any such landings. The assailant had not so great a choice of places for landing as in the passage of a river, for the number of likely places for effecting a landing was limited, and the places were, moreover, the same as those which had been used in the Chino-Japanese war. Besides, the ice at the beginning of the war limited their number still more. It formed, however, no part of the Russian plan to prevent the Japanese from landing, or to render it difficult for them to do so. Where arrangements had been made to oppose a landing, as in the gulf of Liao-tung, they were afterwards abandoned voluntarily. The Russians did not confess to the principle which Field-Marshal

Count Moltke once expressed[1]—that, when opposing a landing, all depended on being first at the threatened point—although they had here every chance of being first. The intruders were being welcomed, in the sure hope that it would afterwards be possible to destroy a much greater number of them; but the fact was here forgotten that, however advantageous it is in war to adhere firmly to a definite general plan of action, the opportunity of making use of momentary advantages must at the same time never be lost sight of.

At the beginning of the war, and also afterwards, the Japanese were reproached with being too slow; the fact, however, had been *overlooked*, that this slowness was chiefly due to the general conditions as then existing. The ice on the coast, and the difficulties which have been described of the march through Korea—all were against a rapid display of force immediately at the beginning of the war. Under these circumstances it was surely wise to save expense as much as possible, and to mobilise the Army only gradually, all the more since Japan was, without that, suffering from want of money. In their conduct of the war the Japanese had constantly to pay due regard to the New York and London Stock Exchanges. If the Japanese had suffered any reverse, these Stock Exchanges would have declined their aid, which cost the country dear enough as it was. To a great extent this accounts for the carefulness by which the Japanese opera-

[1] "Vierteljahres-Hefte für Truppenführung und Heereskunde 1906," page 99.

tions were characterised on the whole, though there was every inclination not to mind any sacrifice of human life where the object of war required it. The importance of money and of the money market, for the conduct of war in our modern times, becomes here clearly apparent. Nor does Japan fail to prove that an army, raised by universal service, gains enormously in moral force by a war, which is supported by popular opinion at home; while an unpopular war, which is not understood by the masses, paralyses the action of high and low in the field, as was the case with the Russians. In such a case there is, at the most, the chance only of performing one's duty honourably, but none for displaying that powerful initiative which alone is the mother of victory.

Carefully prepared as the whole war was by the Japanese, as exceedingly carefully prepared was also the first important action on the Ya-lu. Nothing was neglected that could facilitate the always difficult operation of crossing a powerful river in the face of an enemy, and diverting his attention from the intended point of crossing. The demonstrations at An-tung, close to the mouth of the Ya-lu, were bound to prove more effective here than elsewhere in similar cases, because they gained increased importance for the Russians, when viewed in connection with an apprehended landing of other hostile troops on their right flank or at Da-gu-schan in their rear. The preliminary bombardment next riveted the attention of the Russians to the direction of Wi-tschu, and con-

tributed to their taking less notice of the Hu-san mountains, which without that were difficult enough to keep under observation. Much was also done otherwise by the Japanese to hide their own intentions as much as possible from the enemy. The Japanese troops knew how to cover themselves well in the country, and made ample use of artificially constructed screens.

The inaction of the Russians certainly contributed very much to the success of the operation; but, for all that, the energy displayed by the Japanese is not the less creditable. The work of the Engineers deserves to be specially mentioned. They accomplished a great deal with insufficient means. But to Headquarters of the 1st Japanese Army is due the merit of having, as much as possible, ensured unity in the attack, by precise and clear orders.

From the outset the attitude of the Russians on the Ya-lu suffered from a certain want of decision. Their forces there were too strong for mere observation, and too weak for a determined resistance. Even the Japanese seem to have felt this; for the instructions given to Kuroki to advance with caution after crossing the river, evidently reckoned with the presence of other Russian forces between the Yalu and the mountain passes, and with the possibility of a strategic counter-attack by the Russians. The premature abandonment of the Korean bank of the river, not only stopped any distant reconnoitring, but also took away a more direct pressure on the enemy's right flank by the eleven sotnias of Cossacks, which had been

available for the purpose. Such a pressure would have been far more effective than the barren raid of Madritow. That raid should have been made by stronger forces, if any results were to be obtained from it; but large forces, again, are difficult to move and to supply in the Korean mountains: 500 horse were not enough here to reap any tangible advantages.

Being once behind the river, the Russian Eastern Detachment shared the fate of all troops who have placed the obstacle between themselves and their enemy: it remained permanently ignorant of what was passing on the opposite bank. But close reconnaissance on the Ya-lu itself, and across the Ei-ho into the Hu-san mountains, broke down too; for what was done there was done without any system, and therefore afforded no safe basis upon which to act: the immensity of the danger that was threatening from the Ei-ho was not discerned.

And yet there was a presentiment on the Russian side that an attack was imminent. The junior leaders expressed their misgivings without reserve to General Sassulitsch. He, however, believed himself bound to maintain the position on the Ya-lu, and did not venture to assume himself the responsibility of voluntarily evacuating it. Indeed, the directions he received from Liao-yan were not of a nature to spur him into action on his own initiative. On the one hand, he was certainly enjoined not to enter into an unequal contest; but, on the other, again, the distinct desire was expressed that he should maintain his

position. This desire may have impressed General Sassulitsch all the more, since General Kuropatkin seemed not to believe in an immediate attack, but was rather inclined to look upon the Japanese measures as mere demonstrations. The Commander of the Eastern Detachment was, however, not the man to enforce his own firm will as a leader, in place of the general tactical principles daily arriving for him by wire from Liao-yan, and of the numerous orders of the Commander-in-Chief for details, by which he encroached upon the domain of his subordinate General's command.

But, by holding out in his position beyond April 30, the mischief was done, apart from all minor omissions and accidents. The cordon-like disposition of the troops behind the river, could not resist the weight of the superior attack. The fire-effect of the scattered Russian detachments frittered away in the foreground. Yet the withdrawal might have succeeded almost without any great loss, as the Japanese failed to pursue, if Colonel Gromow had not retired in the wrong direction, by looking after the safety of his own troops, without regard to the Eastern Detachment as a whole. If he had opposed the Japanese right wing at Lau-fan-gou, the mishaps at Ha-ma-tan would probably not have occurred during the retreat. Mistakes in the transmission of orders and intelligence have, it is true, contributed their own share; they furnish the proof that, in situations where retreat is unavoidable sooner or later, the rôle to be played by the various detachments must be exactly defined beforehand.