

HANDBOOKS PREPARED UNDER THE DIRECTION OF THE
HISTORICAL SECTION OF THE FOREIGN OFFICE.—No. 53

D
G
.G7

THE DON
AND
VOLGA BASINS

LONDON:
PUBLISHED BY H.M. STATIONERY OFFICE

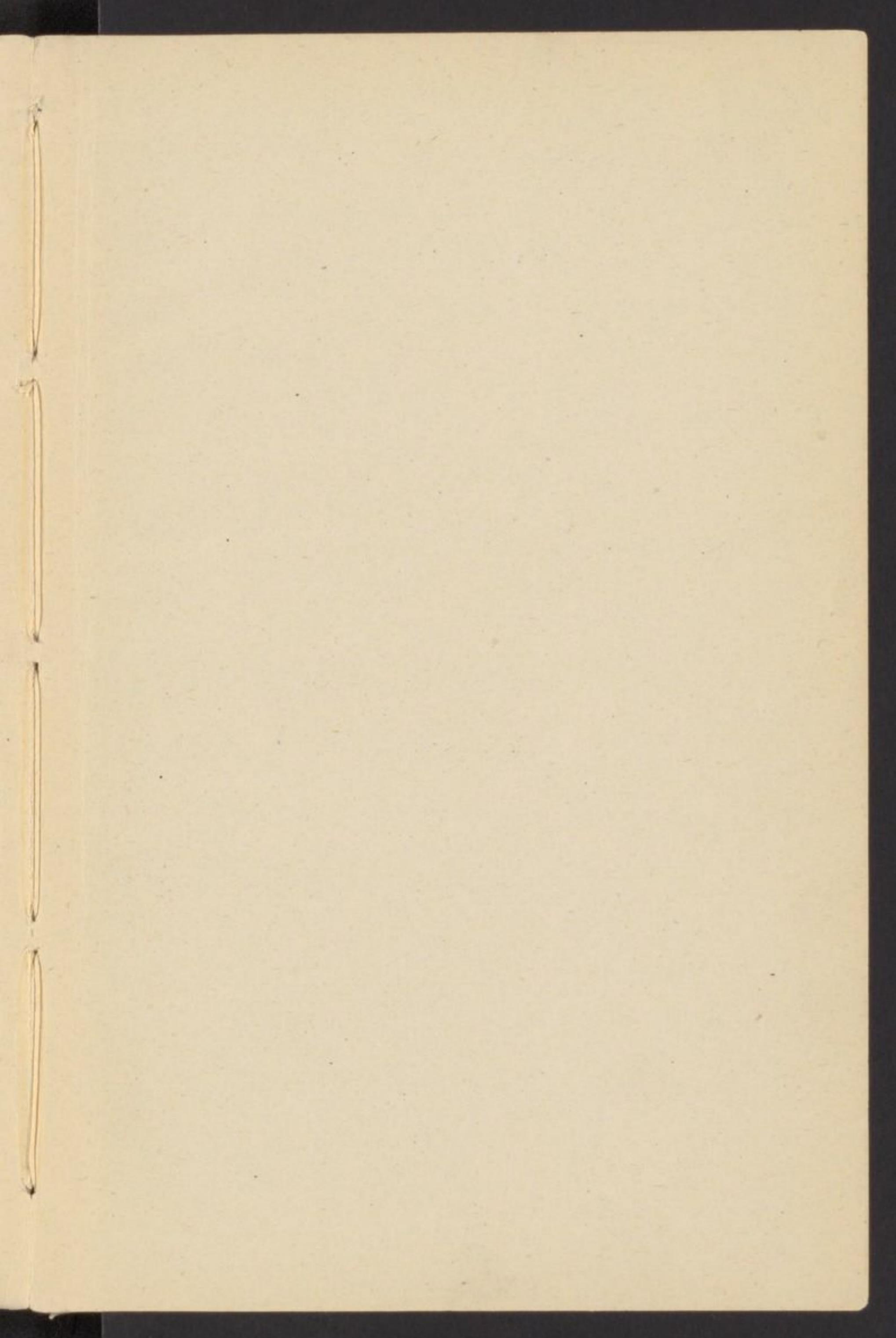


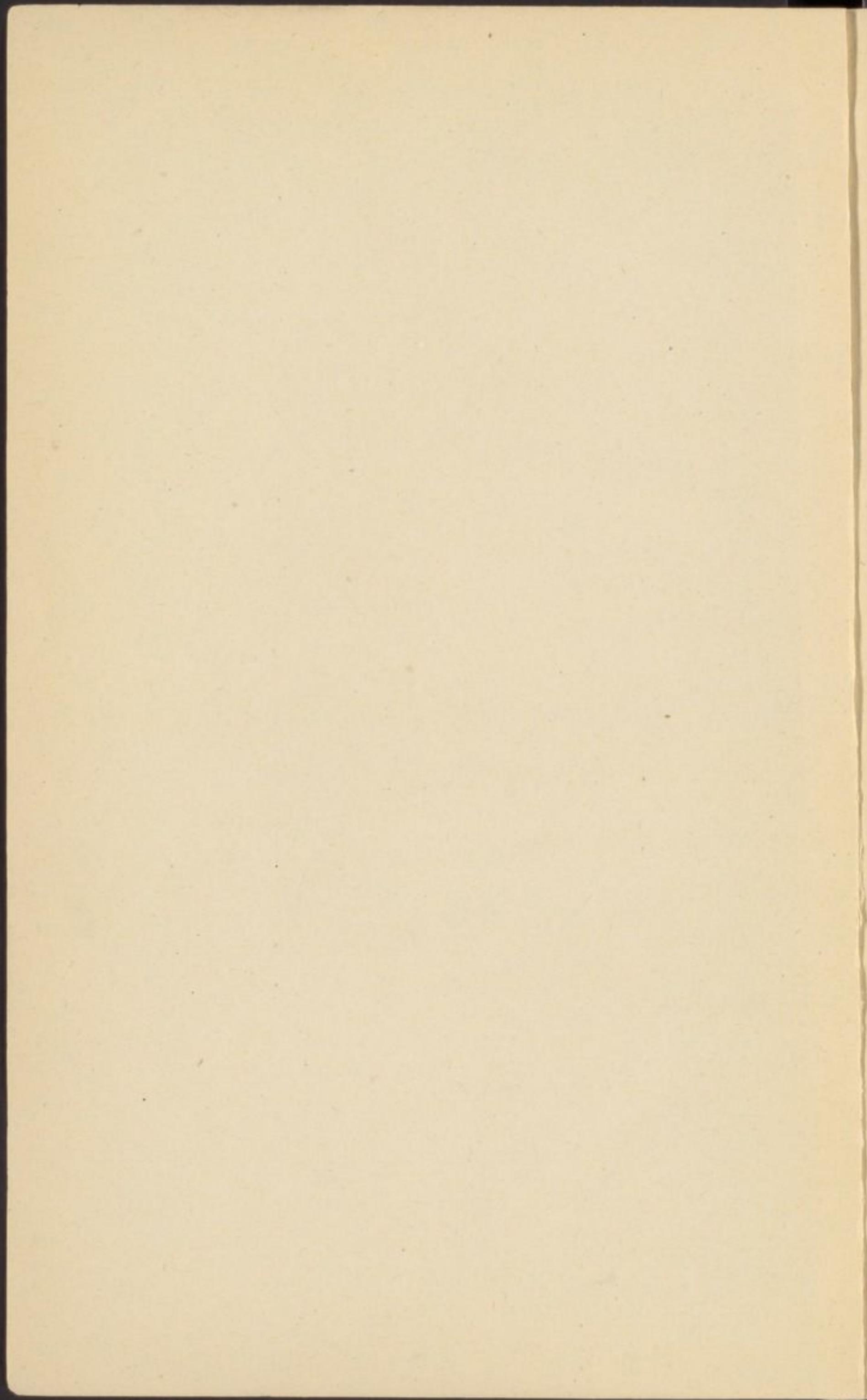
—
1920

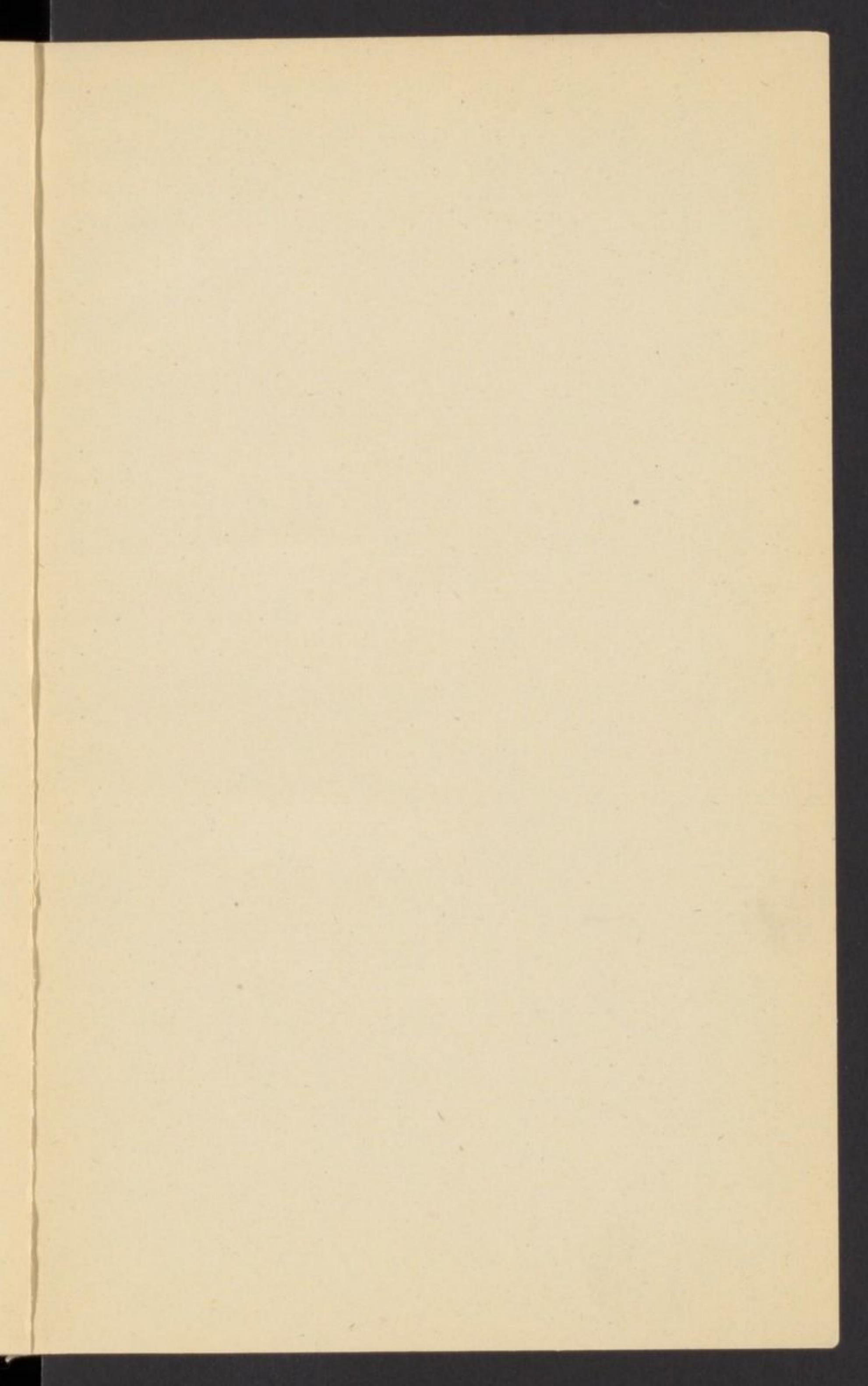


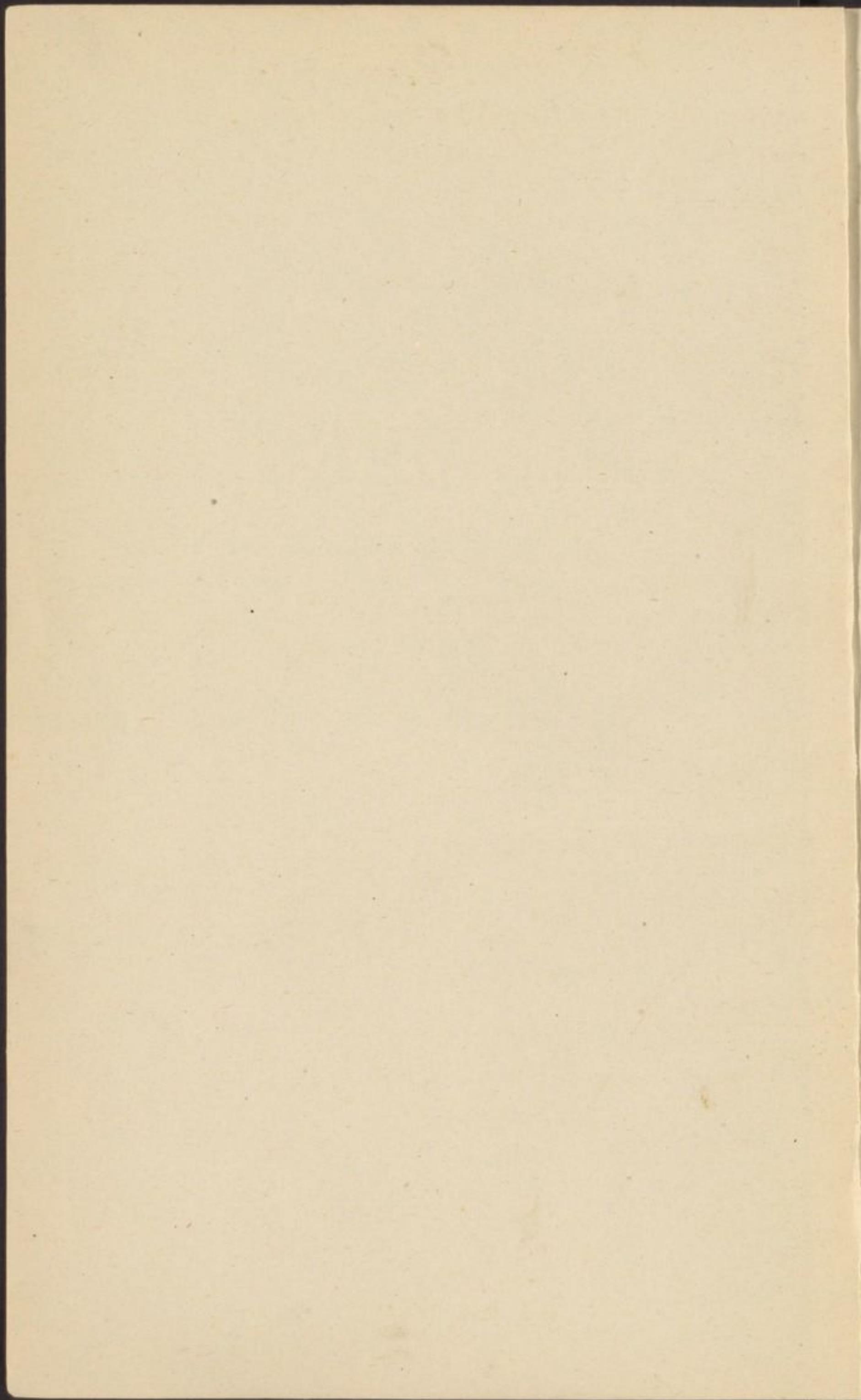
Class II6

Book G7







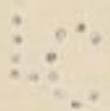


153

HANDBOOKS PREPARED UNDER THE DIRECTION OF THE
HISTORICAL SECTION OF THE ^{Gr. Brit} FOREIGN OFFICE.—No. 53

207
1407

THE DON
AND
VOLGA BASINS



LONDON:
PUBLISHED BY H.M. STATIONERY OFFICE

—
1920

2d set

D6
G7

THE DOZ

FORGE BASTINS

D. of D.
JUN 30 1920

12/11/17
Mar 1, 1921

Editorial Note.

IN the spring of 1917 the Foreign Office, in connection with the preparation which they were making for the work of the Peace Conference, established a special section whose duty it should be to provide the British Delegates to the Peace Conference with information in the most convenient form—geographical, economic, historical, social, religious and political—respecting the different countries, districts, islands, &c., with which they might have to deal. In addition, volumes were prepared on certain general subjects, mostly of an historical nature, concerning which it appeared that a special study would be useful.

The historical information was compiled by trained writers on historical subjects, who (in most cases) gave their services without any remuneration. For the geographical sections valuable assistance was given by the Intelligence Division (Naval Staff) of the Admiralty; and for the economic sections, by the War Trade Intelligence Department, which had been established by the Foreign Office. Of the maps accompanying the series, some were prepared by the above-mentioned department of the Admiralty, but the bulk of them were the work of the Geographical Section of the General Staff (Military Intelligence Division) of the War Office.

Now that the Conference has nearly completed its task, the Foreign Office, in response to numerous enquiries and requests, has decided to issue the books for public use, believing that they will be useful to students of history, politics, economics and foreign affairs, to publicists generally and to business men and travellers. It is hardly necessary to say that some of the subjects dealt with in the series have not in fact come under discussion at the Peace Conference; but, as the books treating of them contain valuable information, it has been thought advisable to include them.

It must be understood that, although the series of volumes was prepared under the authority, and is now issued with the sanction, of the Foreign Office, that Office is not to be regarded as guaranteeing the accuracy of every statement which they contain or as identifying itself with all the opinions expressed in the several volumes; the books were not prepared in the Foreign Office itself, but are in the nature of information provided for the Foreign Office and the British Delegation.

The books are now published, with a few exceptions, substantially as they were issued for the use of the Delegates. No attempt has been made to bring them up to date, for, in the first place, such a process would have entailed a great loss of time and a prohibitive expense; and, in the second, the political and other conditions of a great part of Europe and of the Nearer and Middle East are still unsettled and in such a state of flux that any attempt to describe them would have been incorrect or misleading. The books are therefore to be taken as describing, in general, *ante-bellum* conditions, though in a few cases, where it seemed specially desirable, the account has been brought down to a later date.

G. W. PROTHERO,

General Editor and formerly

Director of the Historical Section.

January 1920.

TABLE OF CONTENTS

	PAGE
I. GEOGRAPHY PHYSICAL AND POLITICAL	
(1) Position and Frontiers	1
(2) Surface, Coast, and River System	
Surface	2
Coast	2
River System	3
(3) Climate	4
(4) Sanitary Conditions	6
(5) Population	
Distribution	6
Towns	7
II. POLITICAL HISTORY	
Chronological Summary	8
(A) The Volga Basin	
(1) Early Middle Ages	8
(2) The Tatar Invasion	11
(3) Rise of Russia	12
(4) Russian Expansion	13
(5) The "Time of Troubles"	15
(6) Russian Expansion Renewed	15
(7) Rebellions	16
(8) Black Sea and Caspian reached by Russia	17
(9) The Nineteenth Century	18
(10) The Revolution of 1905	19
(11) The European War	20
(12) The Revolutions of 1917	21
(B) The Don Basin	22
III. SOCIAL AND POLITICAL CONDITIONS	
(A) The Volga Basin	
Racial Composition	25
(1) The Great Russians	26
(2) The Little Russians or Ukrainians	26
(3) The Germans	27
(4) The Tatars	27

TABLE OF CONTENTS

[No. 53

	PAGE
(5) The Kalmuck	28
(6) The Mordva	29
(7) The Cheremis	30
(8) The Meshchera	30
(9) The Chuvash	30
(10) The Kirghis and Kaizak-Kirghis	30
Occupations	31
Density of Population	32
Education	33
Religion	34
(B) The Don Basin	35

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) Internal	
(<i>a</i>) Roads... ..	38
(<i>b</i>) Rivers	39
(<i>c</i>) Canals	45
(<i>d</i>) Railways	47
(<i>e</i>) Posts, Telegraphs, and Telephones	51
(2) External	
(<i>a</i>) Ports	52
(<i>b</i>) Shipping Lines	56
(<i>c</i>) Telegraphic and Wireless Communi- cations	57

(B) INDUSTRY

(1) Labour	
(<i>a</i>) Supply of Labour ; Emigration	57
(<i>b</i>) Labour Conditions	58
(2) Agriculture	
(<i>a</i>) Products of Commercial Value	61
Rye, wheat, barley, oats	62
Millet, buckwheat, maize, potatoes	62
Peas, beans, lentils	63
Flax, hemp and hay	63
Oil-yielding plants... ..	63
Sugar-beet, hops, viticulture, tobacco	64
Vegetables, fruit and live-stock	65
(<i>b</i>) Methods of Cultivation	68
(<i>c</i>) Forestry	70
(<i>d</i>) Land Tenure	71
(3) Fisheries	74

	PAGE
(4) Minerals	77
Coal	77
Iron, salt, asphalt	78
(5) Manufactures	78
(6) Power	86
 (C) COMMERCE	
(1) Domestic	
(a) Principal Branches of Trade	87
(b) Towns, Markets, Fairs, &c.	89
(c) Organizations to promote Trade and Commerce	92
(d) Foreign, especially British, Interests	92
(2) Foreign	
(a) Exports	93
(b) Imports	95
(c) Customs and Tariffs	96
 (D) FINANCE	
(1) Public Finance	96
(2) Currency	99
(3) Banking	99
(4) Influence of Foreign Capital	103
(5) Principal Fields of Investment	103
 APPENDIX : Acreage and Harvest of Crops	
105	
 AUTHORITIES	
107	
 MAPS	
108	

TABLE OF CONTENTS

THE UNIVERSITY OF CHICAGO
PRESS

1. Introduction

2. The Problem

3. The Method

4. The Results

5. The Discussion

6. The Conclusion

7. The Appendix

8. The Bibliography

9. The Index

10. The Plates

I. GEOGRAPHY PHYSICAL AND POLITICAL

(1) POSITION AND FRONTIERS

THE district of the Don and Volga basins includes the Governments of Astrakhan, Kazan, Kostroma, Nijni - Novgorod, Samara, Saratov, Simbirsk, Vladimir, Voronezh, and Yaroslav, together with the Don Territory.

The following are the areas of the various Governments:—

Great Russia—				Area (sq. m.).
Kostroma	...	...	...	32,480
Nijni-Novgorod	...	...	...	19,792
Vladimir	...	...	...	18,815
Voronezh	...	...	...	25,435
Yaroslav	...	...	...	13,437
South Russia—				
Don Territory	...	...	...	63,725
East Russia—				
Astrakhan	...	...	...	91,327
Kazan	...	...	...	24,601
Samara	...	...	...	58,302
Saratov	...	...	...	32,614
Simbirsk	...	...	...	19,110
Total	...	...	...	<u>399,638</u>

The region under consideration is bounded on the north by the Government of Vologda; on the east by the Governments of Vyatka, Ufa, and Orenburg, the territory of the Ural Cossacks and the Caspian; on the south by the Governments of Stavropol and Kuban and the Sea of Azov; on the west by the

Governments of Yekaterinoslav, Kharkov, Kursk, Orel, Tambov, Pensa, Ryazan, Moscow, and Tver.

(2) SURFACE, COAST, AND RIVER SYSTEM

Surface

The surface of the country comprised in the Don and Volga Governments is remarkably uniform, and is composed of a flat or gently undulating plain which slopes in a south-easterly direction towards the Caspian Sea. There are a few ranges of hills, the chief being the Ergeni Hills, a ridge 200 miles in length, which separates the lower course of the Volga from the basin of the Don, and rises in places to a height of 630 ft.

Parts of the Governments of Saratov, Voronezh, Kazan, Samara, and Simbirsk, and of the Don Territory, fall within the "black earth" region; the soil is consequently of a high degree of fertility, and produces heavy crops. There is a fair proportion of marsh land in certain districts, e.g., the southern part of the Government of Nijni-Novgorod; and the area which is covered by forest is considerable. (A full description of the forests will be found on p. 70.) As a whole, however, agricultural and pasture land predominate throughout most of the Don and Volga Governments, and there are strips of fertile alluvial soil along the courses of all the rivers.

The Government of Astrakhan, beyond the Ergeni Hills, is of a very different character, consisting chiefly of salt steppes broken by occasional groups of sandhills. There are some small salt lakes as the Caspian is approached, and along the course of the Volga there is much marshy country, due to the changing course and continual floods of that river.

Coast

The extent of the coast-line is small, consisting of a stretch bordering on the Sea of Azov, at the mouth of

the Don, which contains the important port of Taganrog; and another bordering on the Caspian, northward from the mouth of the Kuma. The latter is largely occupied by the delta of the Volga, which is divided by the arms of the river into many islands, some of considerable size. The whole of the Caspian shore is low and sandy, fringed with countless islands, and having a background of sandhills. The most considerable port is Astrakhan.

River System

The River *Don* (the Tanais of the ancients; the Tuna or Duna of the present-day Tatars) rises in Lake Ivan, in the Government of Tula, and flows at first southward and then south-east, approaching the bend of the Volga at Tsaritsyn. It then turns south-west and flows through a delta into the Sea of Azov. The total length of the river is 1,325 miles, and its basin waters an area of 166,000 square miles.

The Don flows through the Governments of Tula, Ryazan, Tambov, and Voronezh, and the territory of the Don Cossacks. Its most important tributaries are, on the left bank, the Voronezh, Bitrug, Khoper, Medvieditsa, Ilowla, Sal, and Manych; and on the right bank, the Chir, the Sosna, and the navigable Donets. Of the arms of the delta, the most important are the Kalancha and the Kuturma.

The right-hand banks of the Don are hilly, but the left flat and covered with meadows; this being the case also with most of the tributaries. In its upper course the river is connected with the system of the Volga by the canal of Yepisan, which leads to the Upa, a tributary of the Oka, which in its turn flows into the Volga. The economic value of the Don is greatly diminished by the slight fall and the gradual silting up of the river. The period of open navigation on the lower course is about 260 days, as the river is usually frozen for 100 to 110 days in winter.

The *Volga* rises in the Valdai Hills, in the Government of Tver. It flows through several small lakes, the last being the Volga lake. Its upper course is continued between high banks southward to Subzov, at that point entering the undulating plain, which it does not leave until it reaches Kamishin.

In this section it first flows eastward through the Governments of Tver, Yaroslav, Kostroma, Nijni-Novgorod, and Kazan. From Kazan it flows south past the towns of Simbirsk, Stavropol (below which it makes a sharp bend), Samara, Sysran, Kvalinsk, Volsk, and Saratov. The river turns sharply to the south-east at Tsaritsyn and divides into branches, the most northerly of which is the Akhtuba. In its lower course the Volga forms a maze of sandy and marshy islets, covered with weeds and grass, and through the saline ground of the steppes it passes below Astrakhan into a broad delta, entering the Caspian Sea by eight principal and about twenty smaller mouths. The principal tributaries are, on the right bank, the Oka, the Sura, and the Swiaga; and on the left bank, the Mologa, Kostroma, Unsha, Vetluga, Kama, and Samara. The total length of the river is 2,325 miles, of which 2,240 miles are navigable—2,040 for steamers—and the total area of the basin is 563,300 square miles. The fall of the river is only 890 ft. from source to mouth.

The so-called *satoni sawodi* are short branches, or creeks, connected with the main stream by short, narrow openings, and are of great importance as landing-places.

(3) CLIMATE

The climate in the Don and Volga basins is continental in character. In winter the prevailing winds in Central Russia are from the south-west, which make the climate somewhat milder than in Southern Russia, where northerly and easterly winds predominate at that season. Terrible tempests are common from October to March, especially on the

southern steppes. In summer in Central and Southern Russia the usual winds are from the north-west; and, towards Eastern Russia, from the north. The greatest extremes of temperature are found in the south-east of the provinces, where the long, hot summer resembles that of the Mediterranean coast and the winters are like those of Lapland. The greatest variation of temperature is found in the Caspian depression, where there is a difference of 63° F. between the mean summer and winter temperatures; in Central Russia the difference is 54° F.

The average yearly rainfall varies from 16 to 28 in., and the greatest quantity falls in summer. In Central Russia there is, at all times of the year, an adequate supply of moisture; in winter the ground lies for months under a protective covering of snow. In Southern Russia there is less snow, and owing to the violent hurricanes (*burane*) the deposit is not uniform, which results in the deep penetration of frost into the soil and inadequate moisture when the snow melts. In this area the maximum quantity of rain falls in spring and early summer in heavy rain-storms; in late summer there is little rain and a high temperature, so that the soil is parched.

TABLE OF TEMPERATURE AND RAINFALL.

Town.	Average Temp. Fahr.			Average Rainfall. Inches.	
	Year.	Jan.	July.	Year.	Nov.- Mar.
Astrakhan	49°	10°	$77^{\circ}9$	5.7	1.5
Kazan	37.2	7	67.3	18	5.4
Kostroma	37.3	9.4	66.3	19.4	5.2
Tsaritsyn	44.4	13.4	74.6	—	—
Vladimir	38	16	66.5	—	—
Simbirsk				13.9	May- Nov. 10.6
Voronezh				22.0	13.9

(4) SANITARY CONDITIONS

The conditions of public health differ in no respect from those of the other provinces of Russia. Bad sanitation and unhygienic conditions prevail, and there is great scarcity of medical aid. The death-rate is very high, and there is a considerable infant mortality.

(5) POPULATION

Distribution

The total population of the provinces under consideration was 29,063,500 on January 1, 1915. The distribution was as follows:—

Great Russia—

Kostroma	...	...	1,855,000
Nijni-Novgorod	...	...	2,081,200
Vladimir	...	...	2,225,900
Voronezh	...	...	3,687,000
Yaroslav	...	...	1,416,700

South Russia—

Don Territory	4,013,400
---------------	-----	-----	-----------

East Russia—

Astrakhan	...	...	1,427,500
Kazan	...	...	2,900,400
Samara	...	...	3,899,800
Saratov	...	...	3,432,100
Simbirsk	...	...	2,124,500

The population is densest in the Governments of Kazan, Simbirsk, Nijni-Novgorod, and Vladimir, which lie within the industrial region of Central Russia. The most thinly populated regions are the Don Territory and the Government of Astrakhan. (See also p. 32. For racial composition, see p. 25.)

Towns

The chief towns and their populations (1913) are the following:—

Astrakhan (163,800), a large seaport with a very mixed population; Kazan (195,300), the most important town on the middle Volga; Kostroma (73,820); Nijni-Novgorod (112,300), a very important commercial centre; Rostov-on-Don (204,725); Samara (144,000); Saratov (235,500); Simbirsk (70,500); Taganrog (68,091); Vladimir (43,552); Voronezh (94,800); Yaroslav (120,400).

II. POLITICAL HISTORY

CHRONOLOGICAL SUMMARY

- 5th, 6th, and 7th centuries. The Lower Volga invaded by Bulgars, Avars, and Khazars.
- 10th century. Flourishing of the Black Bulgarian and Khazar empires. Slavonic colonization of the Upper Volga.
- 922 The Black Bulgarians converted to Mohammedanism.
- 11th and 12th centuries. Establishment of Kumans on the lower Don and Dnieper.
- 13th century. The Tatar invasion; establishment of the White and Golden Hordes.
- 1220 Foundation of Nijni-Novgorod.
- 1224 Tatar victory of Kalka.
- 1380 Russian victory over Tatars at Kulikovo.
- 1437 Establishment of the Khanate of Kazan.
- 1480 Power passes definitely from Tatars to Russians.
- 1552 Kazan taken by the Muscovites.
- 1557 Russian conquest of Astrakhan.
- 17th century. "Time of Troubles" and military expansion under the Romanoffs.
- 1623 Subjugation of the Don Cossacks.
- 1670 Rebellion of Stenko Razin.
- 1690 Azov taken by Peter the Great.
- 1705-28; 1735-55 Bashkir revolts.
- 1773-5 Rebellion of Pugacheff.
- 1774 Treaty of Kuchuk Kainarji.
- 1784 Cession of the Crimea to Russia.
- 1792 Treaty of Yassy.
- 1905 Russian Mohammedan Party in Duma.
- 1917 All-Russian Moslem conferences at Moscow and Kazan.
Tatar republic established at Kazan.

(A) THE VOLGA BASIN

(1) *Early Middle Ages*

THE Volga, the great central river of Russia, in its 2,300-mile course from the high ground east of Petrograd to the Caspian, passes through various regions—the upper or forest region, the middle or forest-steppe

region, and the lower or steppe region. It is natural, therefore, that its history cannot be treated as one, but follows, more or less, the divisions indicated. The upper region, i.e. as far as Nijni-Novgorod, was originally inhabited by the Finnic tribes, the Mer, Muron, Mordva, Vyes, and Meshchera, as the present place-names indicate. The Eastern Slavs colonized this land by two routes, along the river Oka from Kiev, and along the river Volga from Novgorod. The first Slavonic colonist must have arrived soon after the foundation of Novgorod and Kiev. From the tenth century onward colonization was more regular; but communication between Kiev and the Oka was more difficult than that between Novgorod and the Upper Volga. The chief stream of immigrants from Kiev-Russ only came after the Turkic Kumans had sacked Kiev in 1203. Yet it is the princes of Kiev who founded the first towns. Yaroslav founded Yaroslav; Vladimir Monomakh founded Vladimir. After the death of Yaroslav the Great, the upper Volga country passed to his fifth son, Vsevolod of Pereyaslav; and hence that part of the upper Volga between Pereyaslav and Yaroslav must have been included in the dominions of the Grand Duke of Kiev. Vladimir Monomakh was the last Kiev prince who exercised power over the Volga princes. After his death Andrei Bogolubski of Suzdal sacked Kiev in 1169 and assumed the title of Grand Duke. Thus it appears that political power had already passed from Kiev to the upper Volga before the Tatar invasion.

The Novgorod chronicle speaks of the expansion of the Russ of Novgorod on the upper Volga, Vyatka and northern Dvina so early as the eleventh century. In 1174 the colony of Vyatka on the river Vyatka was established. But this expansion did not continue farther along the Volga than the point where it is joined by the Oka, and where the town of Nijni-Novgorod was founded in 1220, just before the Tatar invasions. Russian (Slav) infusion before the Tatar invasion was limited to trade relations and the military

control of the Russian princes, centring in the Oka region in the principality of Ryazan, and (in the Volga region) in the principality of Suzdal. It was only under the Tatar domination that a thorough assimilation of the Slavo-Finnic elements took place on the upper Volga, when also the military and political interests of the separate principalities became amalgamated.

The history of the middle Volga is involved with that of the lower, though there were always two centres of power, one at the junction of the Kama with the Volga, and the other at the mouth of the Volga. The Bulgars appeared on the lower Volga about the fifth century A.D., and the Avars about the sixth. Under the pressure of the Khazars, who appeared there about the seventh century, the Avars and the Bulgars moved towards the middle Volga. In the tenth century two powerful states were in existence—the Black Bulgarian empire and that of the Khazars. The former occupied the present Governments of Kazan, Simbirsk, Samara, and part of Saratov, with its capital Bolgar, south of the junction of the Kama and the Volga. It was composed of Finno-Turkic elements, and was much influenced by the old Iranian culture from central Asia. It was an agricultural and commercial state which in 922, during the reign of the Tsar Almas, was converted to Mohammedanism by Arabian missionaries. Meanwhile, on the lower Volga, the Khazar empire was established with its centre at the mouth of the river. Relations between the Khazars and the Bulgars were often unfriendly, but on the whole they helped each other, and the Bulgar trade passed through the Khazar lands. West of the Khazars, on the lower Don and the Dnieper, another Turkic nomad tribe of Kumans (Polovtsi) established itself in the latter part of the eleventh and the twelfth centuries, pushing to the west the Turkic Pyecheneg. At the beginning of the thirteenth century, the Kumans even sacked Kiev, after which they made the chief centre of their power on the lower Don.

(2) *The Tatar Invasion*

A new invasion of the Turks under Mongol leaders, known as the Tatar invasion, began early in the thirteenth century, when one of Jenghiz Khan's chiefs, Subudai, passed from Persia through the Caucasus, and subdued the Kumans (Polovtsi). These in 1224, together with the Russian princes, tried in vain to resist the Tatars at the battle of Kalka. A little later, after the death of Jenghiz Khan (1227), the Tatars returned, and in 1236 subdued Black Bulgaria, and then the Finnic nations, who were dependants of Black Bulgaria. The Russian principalities of the upper Volga, Ryazan, Vladimir, Moscow (in 1292), Pereyaslavl and Tver, were successively conquered.

The Tatar domination of the middle and lower Volga was more thorough than that of the lands on the upper Volga. After the death of Yuji, the son of Jenghiz Khan, the Tatars' Western Empire was divided into the Eastern, or White, and Western, or Golden, Horde. The empire of the Golden Horde was organized on the middle and lower Volga as well as on the lower Don and Dnieper and in the Crimea; and the people of the upper Volga were its vassals. Its centre of power was established at Sarai on the lower Volga; but, though the invasion of Jenghiz Khan was conducted by Mongol pagan chiefs, the Mongols, when once settled on the Volga, accepted the Turkic language and soon afterwards became Mohammedans. Subsequently the Volga Tatars adopted the old Bulgarian civilization, especially on the middle Volga. Those Mongols who did not come under the influence of Bulgarian culture, and continued to be nomads and cattle-breeders, organized themselves at the end of the thirteenth century as an independent state between the Ural, the Volga and the Kama under the chieftainship of Nogai. A new influx of Turkic blood under Tamerlane at the end of the fourteenth century diluted the power of the Golden Horde, though it continued to exist till the end of the fifteenth century. In 1437 Ulu

Mahmed, brother of the Khan of the Golden Horde, left Sarai and went north of the junction of the Kama and the Volga, where he set up a new centre, Kazan. This new Khanate was the successor of Black Bulgaria in trade, industry and Mohammedan culture, and held many native Finnic tribes in tributary dependence.

The remaining bands of the Golden Horde formed themselves into two Khanates—the Crimea and Astrakhan. With the growth of the power of the Moscow Dukes, a struggle between Mohammedan Kazan and the new Russian Orthodox Christian centre was inevitable. The Moscow Dukes took advantage of the war between Kazan and the Khanates of Sarai, the Crimea and Nogai, and of the discontent among the Finnic tribes, which was due to heavy taxation. The fall of Kazan in 1552 changed the policy of Moscow from a defensive to an offensive policy. Although the actual end of the Mongol-Turkic regime came in 1480, it was only after 1552 that the power of the Turks began to be superseded by that of Moscow.

(3) *Rise of Russia*

While these events were taking place on the middle and lower Volga, the Russian principalities on the upper Volga were governed by their own princes, who paid tribute to the Khan of the Golden Horde in Sarai, and were occasionally summoned also before the Grand Khan in Asia. Tatar control was ostensibly limited to the direction of their foreign policy, but the influence of the Asiatic regime penetrated deeply into the organization of the rising Moscow Duchy, and annihilated all the early almost republican influences of Novgorod and Kiev. The first prince who raised Moscow to the grand principedom over the Volga principalities (of which the chief had been Vladimir), and who resumed the colonization of Kama (first begun by the Novgorodians), was Ivan Kalita (1328-41). From that time Moscow grew, expanding eastwards and consolidating her other Russian prin-

cipalities. Kalita increased the importance of Moscow by obtaining from the Golden Horde a mandate to collect taxes for the Khan from other Russian princes; and, as soon as Moscow became a financial centre, he made it also head of the Church, by transferring there the Metropolitanate from Vladimir. Finally, he assumed, with the Khan's permission, the title of Grand Duke. Soon afterwards, the Grand Duke Dmitri "of the Don," with the support of other princes, challenged the Khanate victoriously at the battle of Kulikovo in 1380, though it was not until 1480, during the reign of Ivan III, the first Tsar of Moscow, that the Tatar control came to an end. About the same time Ivan began to subdue by conquest or diplomacy the principalities of the Volga. In 1471, Novgorod was overcome, and in the next year the Finnic Perm. Basil III incorporated the other Volga principalities, and gave to the Moscow Tsars the military powers which they were afterwards to use against their Turko Mongol rivals.

The colonization of the middle Volga by the Slavs had hardly begun in this period. There were only a few towns in existence—Kurmysh on the Sura, built in 1372, and Svyashk, built in 1550. Basil III, to destroy the commercial power of Kazan, established a rival fair at Makariev, which was afterwards moved to Nijni-Novgorod; and the people of the upper Volga began to migrate towards the middle Volga. The line of forts (*cherta*) which the Russians established as a protection against the raids of the Turkic nomads ran along the river Oka from Nijni-Novgorod to Tula at the beginning of the sixteenth century.

(4) *Russian Expansion*

The latter half of the sixteenth century saw a rapid Russian expansion over the middle and lower Volga and thence to the west towards the Don and to the east towards the Ob. The middle Volga and the Kama underwent a rapid russification, chiefly by means of

commercial activities. It was at that time that the colony of the merchant Stroganoffs was organized on the upper Kama—a kind of autonomous commercial kingdom, the militia of which took an active part in the conquest of Siberian lands under the Cossack Yermak. The fall of Kazan was of enormous importance, since it undermined the position of Mohammedan culture and civilization and destroyed the centre of unity of all the non-Russian elements. Thence the Russians spread to the Finnic state of Bashkiria, on the river Byela, and there built the Russian towns of Ufa (1574) and Menzelinsk (1586).

The Russians next met with resistance from the southern centre of Turkish power, Astrakhan; and, though Astrakhan was conquered in 1557, and soon afterwards the first Russian towns, Samara (1586), Tsaritsyn (1589), and Saratov (1590), appeared on Astrakhan territory, the absorption of the lower Volga was not effected as easily as that of the middle Volga. For some hundred years the Moscow princes had to fight the Khanate of the Crimea, the Nogai, Kalmuck and Kirghis, and the Cossack communities which supported these national risings, before the lower Volga could finally be called Russian. In fact, it was only in the second half of the eighteenth century that Catherine the Great finally europeanised the steppes of the lower Volga by inviting thither German and other colonists as well as Russian sectaries.

Four years after the fall of Kazan, the Mohammedans of the town, who had suffered much persecution, rose against the Orthodox rule, and were consequently banished from the town of Kazan, in the neighbourhood of which they formed a colony called Staraya-Tatarskaya-Sloboda. In the latter part of the sixteenth century, a second line of forts was built from Alatyr on the Sura to Orel in the west and Novgorod-Syevyorsk in the south; and at the end of the sixteenth century, a third line as far south as Voronezh and Kursk, which means, more or less, the middle course of the Don. Notwithstanding opposition from the con-

quered Tatars and Finns, as well as from their supporters, the Crimean Tatars, the Russian incorporation of the Volga country as far as the Ural was successful until 1598, when, with the death of the Tsar Feodor I, which brought his dynasty to an end, the "Time of Troubles" began.

(5) *The "Time of Troubles"*

The Russian expansion eastward now ceased for about twenty years. Though the events of this period are usually regarded as a social revolution of the *boyars* (upper classes) against the Tsar's autocracy, and of the lower classes against the *boyars*, they were to a great extent a national rising of the lower classes, whether Turkic or Finnic, aborigines or Cossacks, against the Slavonic invaders who formed the upper classes. The Mohammedan faith began to assert itself in Kazan. Some of the Finnic tribes regained their independence; and the lower Volga, as well as the Trans-Volga, was hardly controlled at all by the central government.

(6) *Russian Expansion Renewed*

During the reign of the Tsar Michael, the first of the Romanoffs, military expansion began again; and the line of forts dividing Moscow from the southern steppe, began in 1636 to be moved southwards. Russian penetration advanced rapidly during the reign of Michael's successor, Alexis. By the middle of the 17th century, three new lines of forts had been built, being prolongations one of another: the Belgorod line, from Akhtyrka through Belgorod to Kozlov; the Simbirsk line, from Kozlov through Tambov to Simbirsk; and the Trans-Kama line from Belyi Yar to Menzelinsk. These new lines of posts had as their object the defence of the right bank of the Volga, no longer against the Nogai, but against the new Asiatic invaders who had superseded the Nogai, the Mongolic Kalmuck. In 1655 these Kalmuck became subject

to the Tsar. Behind the lines of fortresses, the Great Russians from the upper Volga and the Ukrainians from the right bank of the Dnieper began to settle down, forming agricultural islands among the local native population of nomads and the half-nomadic Cossacks. In this way the lower course of the Volga as well as western Siberia became Russian before the lower Don, which ceased to be Turkish only after Peter the Great had captured the fortress of Azov in 1690, or perhaps only after the Treaty of Kuchuk Kainarji in 1774, when Turkey was compelled by Russia to abandon her suzerainty over the Crimea, which was thus opened to Russian influence. This treaty did not put an end to Russo-Turkish rivalry, but it opened enormous possibilities to the Russian colonists, and cut off the Mohammedans of the Crimea and Volga, whether Turkish or Finnish, from their supporters in Constantinople. Before new relations were established between the Volga Moslems and the Mohammedan subjects of Russia in the Caucasus and Turkestan in the nineteenth century, the former Mohammedans had received an infusion of Russian culture.

(7) *Rebellions*

The military encircling of the Volga country by Alexis (1645-1676), Peter the Great (1682-1725), and Catherine the Great (1762-1796), produced discontent and opposition among the inhabitants. Risings were no longer started by the native Turko-Finns, though no doubt the Mohammedans on the Volga supported all rebellions against Moscow, but by Russians, either Cossacks or peasant sectaries, and by all those who wished to avoid the state reforms of Alexis, Peter, and Catherine.

Thus, during the reign of Alexis, the rising of Stenko Razin (1670) united under one banner the Don Cossacks (among whom the movement began) and all the inhabitants of the lower and middle Volga as far as Nijni-Novgorod. Razin was defeated, but smaller risings

under Bulavin, Zametayeff, and Niekrasoff followed; and the peasants united their demand for land with the national demands of the Finnish and Turkish nations of the Volga.

During the reign of Peter the Great there were two serious rebellions. The Bashkir revolt, which was begun on national and religious grounds in 1705 and lasted until 1728, broke out again in 1735 as a protest against the occupation of the land by Russian colonists. This time it lasted until 1755, and all the Mohammedans of the Volga supported the Bashkirs. Moreover, at the beginning of the Bashkir rebellion on the middle Volga, the military organization of the Streltsi raised a rebellion in Astrakhan, which was a protest against Peter's western reforms, and was supported by the Old Believers (Raskolniki). That was the last rebellion of the Streltsi, who were then suppressed.

The people of the middle and the lower Volga gave support to a rebellion against Catherine II under Pugacheff in 1773-5. This originated in the Orenburg country, but was especially vigorous on the Volga from Kazan to Tsaritsyn. It had a more Russian character than its predecessors. Pugacheff appealed to the persecuted peasant serfs, Cossacks and dissatisfied natives for support in his claim to the throne as the heir apparent of Peter III. Thus his movement had a Russian and even a monarchical character, though it appealed to all who would not participate in the westernisation of Russia, and were opposed to a strong central government.

(8) *Black Sea and Caspian reached by Russia*

The recognition of the independence of the Crimea was but one step in the Russian policy towards assimilating this, the last independent Turkish centre in Eastern Europe. In 1783 Catherine II claimed the Crimea for Russia; and by the Treaty of Constantinople (1784) Turkey allowed the claim. This gave Catherine a free hand in colonizing the coasts of the

Black Sea, the Sea of Azov, and the Caspian, in accordance with the same programme. The autonomous rights of the Cossacks were now finally suppressed, and those Ukrainian Cossacks who did not flee to Turkey were transplanted to the Azov country; while foreign immigrants, Germans, Greeks, and Armenians, were invited thither, together with the Russian sectaries who had hitherto been banished abroad.

After 1792 the population of the Volga and the Don Basins was divided into two categories: (a) the Russian and European colonists and the Volga Tatars, all of whom formed a settled agricultural population, and were governed as other subjects of Russia; (b) the steppe natives who received a special code of law by which they were freed from military duties and their clan organizations to some extent recognized. Russification of the middle and lower Volga reached its climax during this period, and scarcely any protest was heard from either the native or the Russian side.

In 1792, by the Treaty of Yassy, Russia occupied the Black Sea coast between the Bug and the Dniester, and at the same time continued the conquest of the Caucasus (finally acquired in 1859) and Central Asia. Thus by the beginning of the nineteenth century the middle and lower Volga and the Don formed part of the inner territories of the Empire.

(9) *The Nineteenth Century*

Till the revolution of 1905 the country of the upper Volga was one of the most prosperous in Russia, though the difference in prosperity between the upper classes and the peasants was here, as in other parts of the Empire, very great. Moreover, both prosperity and education decrease noticeably south and east of Nijni-Novgorod. The difference between the organizations of the peasants of the upper Volga and those of the middle and lower Volga was especially evident at the time of the agrarian reforms of 1907-1912. In the country of the upper Volga distribution of the land

acquired followed the plan of communal ownership, while on the middle and lower Volga individual ownership was more favoured. Especially was this noticeable in the Governments of Samara and Saratov, and to a less degree in those of Simbirsk, Novgorod and Kazan.

While Nijni-Novgorod was the centre of the Russian population of the middle and lower Volga, Kazan and, to some extent, Orenburg and Ufa were the centres of the non-Russian population, mostly Mohammedan. After the establishment of the Kazan University at the beginning of the nineteenth century a class of Russo-Tatar *intelligentsia* arose, which has produced such scholars as Ilmenski and Katanor. Russian policy towards the Mohammedans of the Volga varied according to the personality of the Tsars and their ministers. In 1870 and 1874 the Mohammedan schools were russified, and all Tatar books written in Arabic characters were severely censored. In 1886 a few Mohammedan teachers from Constantinople succeeded in penetrating the country of Kazan; but in 1903 new educational restrictions were issued concerning the Tatar native schools. It is therefore natural that Pan-Islamic propaganda from Constantinople, intended to promote the solidarity of all Mohammedans under the leadership of the Sultan as Caliph, has found some response in the Kazan country, which, being the oldest Mohammedan centre among the Mohammedans of Russia, claimed to be the leader of the other Russian Mohammedans in the Crimea, Caucasus, West Siberia, and Turkestan.

(10) *The Revolution of 1905*

On the outbreak of the revolution of 1905 the Russian Mohammedans combined for the first time in their history. Hitherto even their religious affairs had been dealt with not by one authority but by four (1, Transcaucasia; 2, the Crimea; 3, Turkestan and Transcaspia; and 4, the Volga and West Siberia); and not only did Government restrictions make an understanding between the several branches of Russian

Mohammedans difficult, but there were also differences in language and culture, while some followed Shia, some Sunni, rites. The first visible sign of an understanding was the creation of a Russian Mohammedan Party in the Duma of 1905, which persisted in the Dumas that followed. This party's political orientation did not surpass in progressiveness that of the party of Constitutional Democrats (Cadet). Soon after the outbreak of the revolution more than ten Tatar newspapers were established; and the Koran began to be printed in Arabic, not only for local use, but also for other Russian Mohammedan centres. In 1907 a new and more liberal statute concerning Mohammedan schools was issued, under which the use of both the Tatar and Russian languages was permitted. The Tatar women of Kazan showed their independent spirit, and were probably the first Mohammedan women to demand the reform of some of the traditional Mussulman customs, their demands including the abolition of seclusion and polygamy and the establishment of equal rights of inheritance. They also participated in the elections to the *zemstvos*. Between the revolution of 1905 and those of 1917 the Russian population of the middle and lower Volga underwent a considerable awakening. This internal liberal movement acted to some extent as a check on foreign Pan-Islamic propaganda.

(11) *The European War*

At the beginning of the war of 1914 the population of this part of Russia were almost reconciled to their Government; and both Mohammedans and Russians answered willingly the call to arms. But, as the war continued, the Russian peasants were disillusioned; and the Pan-Turkic (Pan-Turanian) propaganda affected the Tatar population, though it has been less successful here than in Asiatic Russia. Community of race and language was held to justify a united Mohammedan Empire of Turkish-speaking peoples under the

political regime of Constantinople. Such was the Pan-Turanian programme. It did not appeal strongly to the Kazan Tatars, divided as they were geographically from other Mohammedans and mixed with Finnic and Russian peoples.

(12) *The Revolutions of 1917*

After the revolution of March 1917 the first All-Russian Moslem Conference was held in Moscow on May 14, at which the Russian language was the chief means of communication. The Kazan Tatars put forward demands for cultural freedom, but politically they were more friendly towards Russia than were the Trans-Caucasian Tatars. A purely theoretical formula of the "self-determination of nationalities" was adopted, in which they concerned themselves with nationalities in Europe, Asia and Africa, but especially those of Mohammedan countries; and an All-Russian Moslem Council was established. A second All-Russian Moslem Conference was held in August 1917, at Kazan; this was especially concerned with educational reforms in a Mohammedan spirit. Women took a more active part at the first than at the second Conference, when a reactionary section of the Mullahs was against giving them equal rights. The revolution in its first stage gave rise to an idea—to some extent opposed to the Pan-Turkic movement of Constantinople—of a reconciliation and alliance between Russia and Turkey, ensuring the intercourse and development of the Mohammedans of both Empires. Some of the Kazan Tatar papers began to use the Russian language, and fraternisation was fairly universal.

The second or Soviet revolution of September and October 1917 met with opposition from the people of the middle and lower Volga, and had the effect of strengthening the national movements in Kazan and Astrakhan. About the time of the Treaty of Brest-Litovsk, a Tatar Republic was established at Kazan, and a Tatar-Bashkir Republic south-east of Kazan in

the Orenburg Government; while an attempt was made to create an Astrakhan Republic, which, however, owing to a lack of cohesion (there is no *zemstvo* in the Astrakhan Government), did not last long. Since the second All-Russian Moslem Conference, rivalry between the Kazan and Trans-Caucasian Tatars (Baku) has increased. The Kazan Tatars, who follow the Sunni rite and are of very old Mohammedan culture, influenced to a great extent by modern Russian culture and political conceptions, would naturally differ in their demands from the Tatars of the Caucasus, who mostly follow the Shia rite, and have been culturally far more in contact with Constantinople than with Russia, and politically subject to Russia for only about a century. Moreover, there is economic rivalry between them, since the Kazan Tatars depend on Great Russia economically, while the Baku Tatars depend on foreign capital to work their oilfields, and are rivals of the Russians in the colonization of the Caucasus. The Finnic Mohammedans and also the Tatars of Siberia and the Turks of Kirghistan are more influenced culturally by the Kazan Tatars than by Russia.

(B) THE DON BASIN

The history of the Don basin is closely connected with the history of the Don Cossacks, the records of which begin early in the sixteenth century, though the first Cossack bands were known as early as the fourteenth. Before the sixteenth century the Don basin had been the second barrier against all the Asiatic invasions of eastern Europe, the first being the Volga basin. Huns and Avars, Bulgars and Khazars, Pyecheneg and Kumans, were all at one time or another settled in the Don basin. The Tatars were the last to occupy the country, which they held until their power was destroyed by the Russians in the sixteenth century. Even then the Don basin officially belonged to the Khanate of the Crimea; and it is very doubtful whether the Russians would have been able to conquer

it easily had it not been for the voluntary colonization of the basin by independent immigrants, chiefly Great Russians but partly also Ukrainians.

The territory of the Don Cossacks after the seventeenth century was very limited. They were independent of the Upper Volga government, though they fought on the side of the Russian princes in the battle of Kulikovo in 1380. They succeeded in undermining the authority of the Crimean Tatars over the basin and over the port of Azov by their constant raids in the sixteenth century. In 1637 they actually captured the port of Azov, and wished to present it to the Tsar of Moscow, who however declined the offer, feeling that he had not the means of keeping the port in his possession. When, in 1549, the Nogai prince complained to Ivan the Terrible of the depredations of the Don Cossacks, the Moscow Government replied that the Don Cossacks were renegades who did not recognize the authority of the Tsar. Yet they gave their help to Moscow in subjugating the Khanate of Kazan in 1552 and the Khanate of Astrakhan in 1556. In 1570 the Tsar sent to the Don Cossacks an envoy whose mission it was to persuade them to enlist in his service, for which generous compensation was promised. This was the first of incessant and often forcible attempts to subjugate the Don Cossacks to Moscow—a process finally accomplished in 1623, though the territory was not formally acquired from Turkey till 1690, when Peter the Great took Azov.

The history of the Cossacks in the seventeenth and eighteenth centuries is the history of one long struggle between the growing power of the Russian State and these communities, whose reorganization into regiments or *voiskos* (depending directly on the Minister of War and not on the army) was a task neither easy nor rapid. Curiously enough, while the regions of the Dnieper, the Don, the Yaik (Ural) and the Terek continued for a long time to be the quarter whence liberative movements originated, and where rebels found support, those branches of the Don and Yaik

Cossacks who were amalgamated with the forces sent from Moscow to the conquest of Siberia at once became the most devoted servants of the Tsar. The history of the European Cossacks in Siberia, who were originally a branch of the Don Cossacks, is thus somewhat different from their history in Europe. Some of the most renowned rebels against the central government, as Stenko Razin and Pugacheff, still live in the sagas and folk-songs of the Don Cossacks as democratic reformers, fighting for land and freedom for the people, generous to the Holytba (poor Cossacks), just to the Domovityie (rich Cossacks), severe in their morals, and devoted to their cause.

III. SOCIAL AND POLITICAL CONDITIONS

(A) THE VOLGA BASIN

Racial Composition

THE result of the thousand years of colonization of the Volga basin by the Great Russians (originally called the Russ of Novgorod and the Russ of Kiev) is that almost seven-tenths of the present inhabitants are Great Russians. The aboriginal population is almost entirely composed of some still unassimilated Finns and the Turkic people commonly called Tatars. The most purely Russian Governments, i.e. where the Russians form about 99 per cent. of the population, are Vladimir, Kostroma, and Yaroslav. In Nijni-Novgorod the Russians form 93 per cent. of the population. Simbirsk has 67 per cent. of Russians, Saratov 76 per cent., and Samara 64 per cent., while the smallest percentage of Russians is found in the Governments of Astrakhan (40 per cent.), and Kazan (38 per cent.).¹ In the lower Volga district, the Russian colonists are composed of Great Russians and Ukrainians. In the Samara Government the Ukrainians number only 4·3 per cent., in the Saratov Government 6·2 per cent., in the Astrakhan Government 13·2 per cent. In the Kazan Government, where the Russians form little more than one-third, about 54 per cent. of the population are Turko-Tatars and tatarised Finns, and some 8 per cent. unassimilated Finns. The other centre of the Turko-Tatar people is Astrakhan, where they form 30·4 per cent. of the population, while the Mongol Kalmuck form some 13·8 per cent.

¹ According to the latest statistics, published in 1916 by the Central Statistical Society, Petrograd. See *The Russian Year-Book*, ed. N. Peacock, 1919.

A bridge between the Turkish centres in Kazan and Astrakhan is formed by the Turko-Tatar and Finnic people. Thus, in the Government of Saratov, the Turko-Tatar population still forms 4·5 per cent. and the Finnic people 5 per cent.; in the Government of Samara the Finns form 8·8 per cent. and the Turko-Tatars 13·9 per cent.; and in the Simbirsk Government the Finns are 12·4 per cent. and the Turko-Tatars 19 per cent., while in the Government of Kazan the Finns are represented by 8 per cent. The Government of Nijni-Novgorod has some 2·6 per cent. of Turks in its north-eastern corner, and some 3·7 per cent. of Finns in its south-eastern corner.¹ Of the Finnic-Tatar peoples, like the Bashkir, the majority live outside the Volga district, in the Ufa and Orenburg Governments.

The chief elements of the population are as follows :

1. *The Great Russians* in their colonization of the country, especially that of the upper Volga, did not follow any organized plan until the sixteenth century, when the Moscow Government endowed their nobles with land, not only on the upper, but also on the middle and lower Volga. In connection with this measure, serfdom was introduced. The native Tatar and Finnic admixture among the Great Russians becomes more marked towards the south.

2. *The Little Russians or Ukrainians* appeared in the country of the lower Volga in the seventeenth and eighteenth centuries, especially after the reign of Peter the Great, who made a line of forts from Tsaritsyn to the Don to defend Russia from the Kuban Tatars, and brought Ukrainians to live in them. They have mixed sometimes with the Great Russians, but not with the natives. Since their chief occupation is obtaining and distributing the salt from the lakes, they are called *chumaki* (local name for the occupation).

¹ These official statistics were checked by the Central Statistical Society of Petrograd in 1916, but are, if anything, to the disadvantage of the native populations, who in many cases adopted Russian as their second language, but consider themselves a nation apart.

3. *The Germans* of the Volga basin originally came from Westphalia, Bavaria, Saxony, Swabia, Alsace-Lorraine, and Switzerland. They live in 190 colonies in the Samara Government (districts of Nikolaev and Novo-Uzansk) where they form 8·2 per cent. (in 1916) and in the Saratov Government (districts of Kamishin, Atkarsk, Saratovsk, and Tsaritsyn), where they form 6·9 per cent. (in 1916). Their number, according to the last census, was about 400,000. They own some one and a half million *desyatines*,¹ partly as private but chiefly as communal land. The colonists of Saratov have adopted Russian names, while those of Samara keep their German names. The first German colonists came after the decrees of 1763 and 1764. Their chief occupations are agriculture, especially the planting of tobacco, and hand industries, such as carpentry and smiths' work. They are Lutherans, Protestants of non-Lutheran creed, or Catholics. In the town of Saratov there is a Catholic seminary for German clergy, and thus the town has become the centre for the German Catholics in Russia, while the Protestant German clergy come mainly from the Baltic provinces, with which they naturally have closer relations. On the whole, the German colonists on the Volga mix less with the Russians than they do in the Baltic provinces or in the Ukraine, and there are many of them who can scarcely speak Russian.

4. *The Tatars*.—Various Turkic or turkicised peoples, remnants of the Khanates of Kazan and Astrakhan, live chiefly in the Kazan Government (according to the 1909 census, about 1,200,000, though this number can easily be challenged) and in the Astrakhan Government (50,000). From the original Kazan centre, however, the Tatars dispersed all over the Volga country and the large cities of Russia; and they are now to be found in the Governments of Petrograd, Moscow, Ryazan, Tambov, Orenburg, Perm, Nijni-Novgorod, Pensa, Saratov, Vyatka, Samara, Simbirsk, and Ufa.

¹ 1 *desyatine* = 2·7 acres.

The reason for so wide a distribution is to be found in the fact that the Tatars have an aptitude for commerce, being good hawkers and pedlars, and that they form almost half of the domestic servants, hotel-boys and horse-dealers in the large towns of Russia. They also have a monopoly of the export of salt and hides, and a considerable share in that of corn, for the Kazan Tatars are well known as agriculturists and gardeners. In all these occupations a class system is preserved. To the upper class belong the nobility and clergy (the various Khans, Begs, Oga, Murza and some princes who own lands as *Mulkadars*, *i.e.* receiving from the cultivator a *mul*, or four-tenths of the harvest). The next or middle class is formed of financiers and manufacturers, and the third or lowest class of agriculturists, gardeners, pedlars, domestic servants, etc. The upper class is more russified than are the other classes, though the intellectuals, the *intelligentsia*, who belong to the middle class of the Tatars, are the most independent in Mohammedan religious matters. On the whole, the Volga Tatars are very intelligent individually, but are socially backward. There are scarcely, if any, social organizations other than religious.

The Tatars of Astrakhan live in that part of the town of Astrakhan which is called Tsarevo. In the Government of Astrakhan the Tatars are divided into (a) Yurtovsky, those who live in the *yurta* or felt tent and are descended from the Turko-Mongols of the Golden Horde; and (b) Kundorovsky, or Nogai Tatars, who migrated to this part in the eighteenth century from the northern Caucasus. They live especially in the district of Krasnoy-Yar, and are nomad cattle-breeders, while the Yurtovsky Tatars are agriculturists, gardeners, and traders.

5. *The Kalmuck* live chiefly in the Government of Astrakhan. They belong to the western branch of the Mongols, and they came to the right bank of the River Volga from Jungaria in the seventeenth century. They soon subjugated to themselves all the native popu-

lation from Samara to Simbirsk, though they were formerly the vassals of Moscow. When, in 1771, the Russian Government imposed on them its administration, most of the Kalmuck, especially of the Torgout clan, went back to Mongolia; and the remaining seven *ulus* (settlements) were concentrated in the steppes between the Volga and the Don. They are usually called the Volga, Don, or Stavropol Kalmuck. In 1897, their number was officially given as about 190,000; but an ethnologist, H. Zhitetsky, who studied them a little earlier, estimated it at half a million. They speak and write Mongol and, with the exception of a small number of pagans, are Buddhists. They are for the most part cattle-breeders. In 1892, the Russian Government issued a code of law for the steppe natives, based on tribal law, which destroyed the power of the Kalmuck nobility over the commoners. The clergy play a very influential rôle among them, and in 1862 formed 5 per cent. of the male population.

6. *The Mordva*.—Before the Russian colonization, the Mordva (a Finnic tribe) occupied the territory between the Volga, the Oka and the Sura. Now their territory is less extensive, but it is still spread over the Governments of Kazan, Samara, Saratov, and Simbirsk, as well as Ufa and Orenburg. They are divided into two sub-groups. The larger of these is called Erza and is situated in the southern districts of Nijni-Novgorod and Simbirsk, and in the Governments of Tambov, Pensa, Samara, Orenburg, and Ufa. The smaller group is called Moksha; its members live in the Saratov Government. The state of Mordva was independent before the time of the Black Bulgarian Khanate, and then became a dependency of Bulgaria and the Tatars. In spite of this political dependence, its agricultural development gave it a unique place among the Finnic tribes. It was only after the fall of Kazan that this state passed under Russia: and it was colonized only after the best Mordva land had been distributed among the Russian nobles. The Erza Mordva gave an active support to the risings of Stenko Razin and others.

Under the pressure of Russian colonization they migrated south to the Governments of Simbirsk, Tambov, and Pensa. The Mordva of Nijni-Novgorod accepted Russian Orthodoxy in the sixteenth century; but even these kept their native Finnish language, and lived in their own villages, where they were more prosperous than the Great Russians in theirs. The Mordva of Saratov are surrounded by the Russian sectaries, who have a strong influence over them. Hence, even among the Mordva women, there is a strong tendency towards monastic life. At the time of the last census, there were about half a million Mordva.

7. *The Cheremis* are usually divided into meadow and mountain Cheremis, according to whether they live on the right or left bank of the Volga. They live to the number of about 100,000 in the northern districts of the Kazan Government, but the bulk of them are found in the Government of Vyatka. The Cheremis have adopted the Turkish language, and are very dependent on the Tatars.

8. *The Meshchera* (Finnic) live, to the number of 10,000, in the Balashov and Gerdobsk districts of the Saratov Government. They are perhaps the most russified of all the natives, since they formerly lived in the Government of Ryazan, which was thoroughly permeated with Russian culture.

9. *The Chuvash*.—Two-thirds of the Chuvash live in the Kazan Government and a few of them also in the Government of Saratov. They are also divided into those who live along the river Sura on the hilly side of the country, and those who live in the low-lying districts. They are first heard of towards the end of the sixteenth century, when the Russians penetrated to their lands. They are considered to be the descendants of the Volga Bulgars, but, like the Cheremis, they now use the Turkish language.

10. *The Kirghis* and the *Kaizak-Kirghis* are all nomads. Those living in the Trans-Volga district of the Astrakhan Government are called Bukeev

Orda ("Inner Horde"), while the others belong to the "Little Horde." They number some 200,000.

Occupations

Agriculture, forestry, fishing and hunting are the chief occupations of the people in the Volga basin.¹ These occupations are followed, in the Governments of Simbirsk, Samara, and Kazan, by more than 800 out of every 1,000 inhabitants; in the Governments of Saratov, Yaroslav, Kostroma and Astrakhan by more than 700, in the Government of Nijni-Novgorod by more than 600, and in the Government of Vladimir by more than 500. In the Government of Astrakhan fishing, hunting, and cattle-breeding are the chief occupations. Mining and domestic industries play an important rôle in the Government of Vladimir, where, out of every thousand, 270 are engaged in them. In Nijni-Novgorod 150 are thus occupied; in Kostroma and Yaroslav 100; in the Government of Saratov 80; in the rest, the number fluctuates between 40 and 60.

Trade occupies the greatest number of people in the Governments of Yaroslav and Astrakhan (36 per 1,000); then come Saratov (31 per 1,000), Nijni-Novgorod (30 per 1,000), Vladimir (27 per 1,000), Samara (22 per 1,000), Kazan (19 per 1,000), Kostroma (18 per 1,000), and Simbirsk (17 per 1,000). Of people who live on private means or are supported by government endowments,² the largest number live in the Yaroslav Government (24 per 1,000). Then come Vladimir (21 per 1,000), Nijni-Novgorod (19 per 1,000), Saratov (16 per 1,000), Kostroma and Astrakhan (15 per 1,000), Kazan (14 per 1,000), and Simbirsk (also 14 per 1,000). In the first class of occupations (agriculture, fishing, etc.) must be included cattle-breeding,

¹ In the official statistics these occupations are grouped in one class, according to Yasnopolski, who bases his work on the statistics of 1909.

² This does not mean government officials, who are grouped together with the professionals and form between 13 and 15 per 1,000 in each government.

which is most advanced in Vladimir. The so-called *kustarni* industries (home industries) are especially well developed in the Governments of the upper Volga.

Generally speaking, the upper Volga country, including Nijni-Novgorod and Rybinsk, is closely connected with the central industrial district of Great Russia lying around Moscow. Nijni-Novgorod is one of the chief centres for the trade of the interior of Russia, while Rybinsk is the chief corn centre for the whole of the north of Russia. It is also the demand of the central industrial provinces which makes the *kustarni* industries of the Governments of Vladimir, Nijni-Novgorod, Yaroslav and Kostroma so flourishing. The surplus of labour from the upper Volga migrates in the off-season to the central provinces. The middle Volga country and the northern part of the lower Volga are agricultural; the flour industry of the Saratov and Samara Governments, and the timber trade (at Tsaritsyn) of the Saratov Government, are the most important industries. The people of the lower Volga are chiefly occupied in cattle-breeding and bee-keeping. All over the Volga country a great percentage of the population is engaged on river navigation work. Still, there is a great surplus of labour, which every year migrates to Sysran, Saratov, Pokrovskaya or other places in search of temporary work.

Density of Population

According to the statistics of 1913 (Yasnopolski), this is as follows: Kazan, 50 people to the sq. verst (= 0.44 sq. mile); Simbirsk, 46; Nijni-Novgorod and Vladimir, 45; Saratov, 42; Yaroslav, 40; Samara, 27; Kostroma, 23; and Astrakhan, 6.

In 1909, in the Government of Kazan, there were 2,433,600 people living in the rural districts and only 218,600 in the towns. In the Government of Simbirsk, 221,351 people live in towns, while 1,328,109 live in the rural districts. The rural population in Nijni-Novgorod is 1,820,300, while the urban is 156,500. In

the Government of Vladimir there are 1,643,900 people living in the country and 228,100 in the towns; in the Government of Saratov, 2,635,500 in the country and 426,400 in the towns; in the Government of Yaroslavl, 1,048,000 in the country and 160,100 in the towns; in the Government of Samara, 3,309,800 in the country and 178,100 in the towns; in the Government of Kostroma, 1,570,300 in the country and 104,500 in the towns; and finally, in the Government of Astrakhan, 1,047,100 in the country and 183,200 in the towns.

Education

According to the statistics of 1909, the percentage of literates is highest in the Government of Yaroslavl, where they form 40 per cent. of the total population. Then comes the Government of Vladimir with 35 per cent. The remaining governments come in the following order: Kostroma, 32 per cent.; Saratov, 31 per cent.; Samara, 29 per cent.; Nijni-Novgorod, 28 per cent.; Kazan and Simbirsk, 23 per cent.; and Astrakhan, 20 per cent. There is only one university in the Volga basin, namely, at Kazan. On account of the war, the University of Warsaw was moved in 1915 to Saratov. Kazan, however, is the centre of higher education, having, besides the university, an academy for the Orthodox clergy, a veterinary institute, and about thirty-two schools. It is strange, therefore, that the number of literates in this government is almost the lowest; but this may perhaps be explained by supposing that the Russian census disregarded those who could read and write in a native, but not in a Russian, language. It must be remembered that Kazan was the centre of Mohammedan learning, which was forcibly suppressed until the reopening of the Russian Kazan University at the beginning of the nineteenth century, when the Turkish language and history were there studied by many scholars. Since 1716, when the first Russian school was opened in the district, the Russians have tried to transform the native religious schools into

Russian government and church schools. After the Government of Kazan, the greatest number of schools is found in the Government of Saratov, where there are about twenty. The influence of the German colonists in Samara, Saratov, and to some extent Astrakhan, is very noticeable in educational matters.

Education has been chiefly cared for by the *zemstvos* except in the Government of Kazan, where it was made a matter of politics and a means of spreading Great-Russian learning, and in that of Astrakhan, where there were no *zemstvos* and the level of education was very low. The Turko-Tatar schools, *mektebehs* and *medressehs* (Mohammedan higher and lower church schools), were placed under the Russian Ministry of Education in 1874; and, a few years previously, the Russian language was introduced into all of them. The Law of 1907 gave more freedom to these schools, but it was only after the revolution of 1917 that they became again quite independent.

The greatest number of printing establishments at the time of the last census was in Saratov (21). Kazan had 15 and Samara 12. The greatest number of bookshops was in Saratov, where there were 84. Samara had 22, Astrakhan 20, and Kazan 17.

The chief Mohammedan papers of the Volga basin are the *Nasha Gazetta*, *Terdzhiman*, *Mussulmanin*, *Mir Mussulmanskii*, *Vakt*, and *Turmush*.

Religion

The Russian Orthodox religion is followed by almost three-fourths of the people in the Volga basin. Next in numbers come the Mohammedans, some 16.4 per cent.; the Protestants, 3.3 per cent.; and the sectaries, 2.3 per cent. (These official figures of the 1896 census are open to challenge.) The Buddhists and Catholics form about 1 per cent. each, while Armenians number 0.1 per cent., and the Jews 0.05 per cent.

The sectaries represent almost all the existing sects in Russia, not only branches of Protestantism such as

Baptists, but also Mennonites, Dukhobors, and offshoots of Russian Orthodoxy such as the Skoptsi. They are especially numerous in the Governments of Nijni-Novgorod (4·7 per cent.), Samara (3·5 per cent.), Saratov (2·8 per cent.), and Simbirsk (2 per cent.). In all these governments the Russian Church has instituted special monasteries and schools to convert the sectaries, just as in the Governments of Kazan and Astrakhan there are special missions for the conversion of the Moslem. The total number of Mohammedans under the jurisdiction of the Orenburg Mohammedan circle was, in 1909, 5,283,618. Of these, some 1,500,000 are Kazan and Astrakhan Tatars, and some 2,400,000 are Bashkir and Chuvash. The remainder are the Tatars of Siberia and a part of the Kirghis.

(B) THE DON BASIN

The Don Cossack territory extends over 143,167 sq. versts, and has a population of 3,395,900, of which 3,050,100 live in the country (according to the statistics of 1909). The country people live either in military camps or in villages. The military are divided into ten regiments. The Kuban Cossacks form thirteen regiments.

Speaking generally, the Cossacks have three or four times as much land per head as the Russian peasantry. Besides very large endowments of land, they enjoy the privilege of being free from taxation and of being governed by a special Cossack Board in the Ministry of War, which makes them autonomous as regards the neighbouring population. In 1905, out of 14,074,000 *desyatines* of arable land, 2,318,000, or 16·5 per cent., were owned by individuals, and 9,847,000, or 70 per cent., by village communities. The remaining 13·5 per cent. belonged to the State or was held in the form of appanages.

In return for their privileges, the Cossacks have to render military service to the State. Theoretically, all the male population from eighteen years of age has to

serve for nineteen years. Those not fit for military service pay money to the community, and are placed on the lists of special regiments called *lgotnyie polki*. The Cossack is obliged to provide his own horse and uniform, the Government supplying only arms. Several other duties normally devolving upon the Government, such as the upkeep of the roads and of schools, and the provision of medical treatment, rest with the Cossack community. As compared with the bulk of the Russian army under the old regime, the Cossack regiments are of small proportions. In times of peace the total number of all Cossacks under arms is 55,000; in time of war the number is 180,000. But, as a matter of fact, during the late war many more of them were called out. It is common knowledge that, as a fighting force, their quality far surpasses their quantity.

The Don Cossacks' territory was divided in 1802 into seven districts, to which others were added in 1806 and 1887, when the territory was divided into the following nine districts (*okrug*): Cherkasski, Donski I, Donski II, Ust-Medvieditski, Khoperski, Donetski, Rostovski-on-Don, Taganrogski, and Salski. The whole territory was governed by an *ataman* or hetman. Each district had also its Ataman General. The land belonging to a *voisko* (regiment) is only to a small extent used by its own people; the greater part is rented to various non-Cossack people, excluding Jews. Thus, in the Don territory only 400 people per 1,000 are Cossacks; and in the other Cossack territories the percentage of Cossacks is still smaller. The Great Russians are in a majority, forming 66·8 per cent. of the population; then come the Ukrainians, 28 per cent.; the Germans, 1·3 per cent.; the Mongols number 1·2 per cent.; and the Jews, 0·5 per cent. The chief social distinction within the Cossack community is that the officers, who are nobles, are permitted to have private estates out of the land belonging to the *voiskos*. As a rule, also, they are better educated, though on the whole the percentage of illiterates among the Cossack popula-

tion is small. Among the Don Cossacks the percentage of those who can read is 66, while that among the other peoples inhabiting their territory is only 30.

In peaceful times the Cossack industries are agriculture, fishing, and cattle and horse breeding. In 1897, 754 out of every 1,000 people were engaged in these occupations. Agriculture, however, is still at a primitive and wasteful stage. Artisans and miners number 96 out of every 1,000.

In 1892, the Don Cossacks were divided in their religious beliefs as follows:—Of the Orthodox Church, there were 1,864,881; of the sectaries, 123,039; of other Christians (possibly also sectaries), 43,714; of Jews, 15,154; of Mohammedans, 2,478; and of Buddhists, 29,551.

The Government of Voronezh, situated on the upper Don and its tributaries, shares, to a great extent, the features of the Don basin. In 1909, the population numbered 3,286,700, of whom 187,000 lived in towns and 3,099,700 in the country. The literates number only 22 per cent. In 1897, 852 out of every 1,000 people were engaged in agriculture, hunting, fishing and forestry, 58 in mining and home industries, and 20 in trade. Out of 5,618,000 *desyatines* of land, 28·3 per cent. was privately owned, and 66·7 per cent. was held in communal ownership. The remaining 5 per cent. was government land and appanages, but the territory in cultivation in 1909 only amounted to 1,844,000 *desyatines*. Ethnically, as well as economically, Voronezh resembles the Don Cossack territory, in the predominance of Great Russians (63·3 per cent.) over Ukrainians (36·1 per cent.), and also in the fact that it has almost no other ethnic element, the Jews forming only 0·09 per cent. and the Germans 0·08 per cent. of the population.

IV. ECONOMIC CONDITIONS

(A) MEANS OF COMMUNICATION

(1) INTERNAL

(a) Roads

ROADS as a means of communication do not reach a high standard in Eastern Russia, nor have they been constructed in any close network to facilitate local transport. For administrative purposes the authorities divide them into three classes: metalled roads, paved roads, and soil roads. The metalled roads are for the most part constructed by the State for strategic purposes. In the area under consideration, which is more than twice that of Great Britain and Ireland, the length of first-class roads amounts only to 622 miles, and of this almost negligible mileage over two-thirds is in the closely populated industrial province of Vladimir. Second-class or paved roads are also few in number; in the whole area their total length amounts only to 557 miles, scattered about in small sections. Roads of the third class, which are merely tracks worn by traffic, upon the upkeep of which very little is spent, have a total length of 131,177 miles. More than half of this is in the Don Cossack territory, the remainder being fairly evenly divided among the other provinces. Astrakhan, however, although fourth in size of the Governments of European Russia, has only 3,378 miles of road, all of the third class.

The upkeep of the roads is undertaken by the State, the *zemstvo*, or the *mir* (local commune), according to the degree of importance of each particular road. None of these authorities spends adequate sums on maintenance as understood in Western Europe. It must not, however, be overlooked in this connection that

for at least five months in the year a hard-frozen surface, with a thick covering of snow, enables sledge traffic to proceed on a large scale, and that the transport problem is thus partly solved. In the more closely-populated industrial provinces some development of roads suitable for commercial motor-traffic is foreshadowed; but in the agricultural and steppe provinces the comparative thinness of the population over vast areas and the timely assistance of the winter conditions already mentioned will probably combine to leave roads much as they are for some time to come.

(b) Rivers

The River Volga is the longest navigable waterway in Europe. Its length from the source to the Caspian is 2,325 miles, while the straight line between these two points is only 992 miles in length. The Volga becomes nominally navigable at a point 75 miles from the source, where is situated the "Upper Volga Dam." This is a wooden erection on a stone foundation, constructed in 1843, which holds back considerable quantities of water in the spring season, releasing it as required in July and August, when the river falls and navigation is impeded for lack of depth.

Although it is the most important waterway in Russia and carries a vast traffic, the Volga suffers from certain natural disadvantages, common to all Russian rivers. It is completely frozen up for a period of the year which varies at different points from 195 to 260 days. Again, the area of its basin is slowly drying up, especially in the lower reaches; the rainfall is gradually decreasing, and dry seasons with consequent low water from July onwards are becoming more and more frequent. During May and June a depth of 30 ft. of water throughout the length of the Volga from Rybinsk to the Caspian can be reckoned upon; but there is always a subsequent fall, and this is frequently so great and rapid that from July until the freezing up

full freights cannot be carried. A notably bad year was 1913, when the river fell in places to a depth of as little as 30 inches, and only half freights could be loaded until the close of the season. Yet another cause tending to hamper navigation is the reckless exploitation of the riverside forests, which has rendered the banks so unstable that at flood-times enormous quantities of soil are washed down, large sandbanks formed, the bed altered, and navigation channels obstructed.

The average quantity of freight carried annually on the navigable waters of the Volga basin is 16 million tons. This is only a quarter of the amount carried by the Rhine; nevertheless the importance of the Volga basin to Russia is very great. Of the various commodities carried over the inland waterways of Russia, the proportion freighted in the Volga basin is 50-60 per cent. of the grain of all kinds, almost all the mineral oil, 85 per cent. of the salt, and 37 per cent. of the timber.

For purposes of navigation the Volga is divided into six sections: (1) From the Upper Volga Dam, 75 miles from the source, to Tver; (2) Tver to Rybinsk; (3) Rybinsk to Nijni-Novgorod; (4) Nijni-Novgorod to Kazan; (5) Kazan to Tsaritsyn; (6) Tsaritsyn to the Caspian Sea. In most of these sections there are rapids and places dangerous to navigation.

The first section is exclusively used for floating rafts, some of which are shot through the open sluices of the dam. The rapids and shallows here are many, and the dangers of navigation are great.

Section two is also relatively of small importance, and is used by barges for local traffic only. Up to June 20th vessels drawing 2 ft. may use the river; after that date the draught must not exceed 21 in. Navigation usually ceases early, owing to lack of water. The influence of the Upper Volga Dam is felt slightly in this section, raising the water sometimes as much as 9 in., which is sufficient to tide over the difficulty of low water.

Rybinsk is the real head of Volga navigation. The main river is joined by the Mologa a few miles above the town, and by the Shekhsna at Rybinsk itself. The Shekhsna is navigable and provides the connections by means of the Marie and Alexander of Würtemberg canals with the basins of the Neva and the Northern Dvina respectively. The largest vessels plying on the Volga, including the luxurious passenger steamers, make their way up to Rybinsk. The town is practically a large warehouse and transfer station, cargoes being transferred here into smaller vessels for further transit or loaded on rail. Fifteen thousand vessels on an average enter and clear the port annually.

Section three, from Rybinsk to Nijni-Novgorod, is 349 miles long, and contains the important towns of Yaroslav, Kostroma, Kineshma, and Jurievets-Povolgsk. The normal draught of vessels in this section is 3 ft. 6 in., but in years of low water navigation is completely suspended in July and August. There are 30 commercial landing-stages and 20 *satoni*, or harbours suitable for wintering vessels.

Section four, from Nijni-Novgorod to Kazan, is 299 miles long, and contains the important towns of Makariev (where the fair now held at Nijni was formerly held), Kosmodemyansk, noted for its timber fair, Vasil, and Svyashk. The normal draught of vessels in this section is 5 ft. There are 40 commercial landing-stages and 40 harbours, but only 10 of the latter are thoroughly ice-proof, the best being at Linkhovsk, Zhkovsk, Linskovsk, and Zvenigsk. In spite of the size and importance of the town, there is no harbour at Nijni-Novgorod.

Section five, from Kazan to Tsaritsyn, is 938 miles in length, and includes many important cities and towns, among which are Spask, Simbirsk, Stavropol, Samara, Sysran, Vologsk, Saratov, and Kamishin. The normal draught of vessels in this section is 7 ft. There are 37 commercial landing-stages and 28 harbours; of the latter six are thoroughly safe and ice-proof, namely, those at Spask, Balimirsk, Samara,

Cherny, Alexievsk, and Tsaritsyn. At a spot 15 miles above Tsaritsyn the Volga divides into two arms which join again some 70 miles lower down. The arm which runs more direct is called the Akhtuba, but, as it misses Tsaritsyn, it is little used for navigation.

Section six, from Tsaritsyn to the Caspian Sea, is divided into two parts: (i) from Tsaritsyn to Astrakhan, 343 miles, where the navigation is still of the river type; and (ii) from Astrakhan to the open Caspian, 71 miles, a stretch of non-tidal estuary offering peculiar difficulties to traffic. Between Tsaritsyn and Astrakhan the Volga is split up by many hundreds of islands, some of which are several miles in length. At high water season in May and June the islands are submerged, and a vast area on either side of the river is flooded. On this reach the only places of importance are Chernoi-Yar and Yenotayevsk, which are fishery centres. Some little distance above Astrakhan the Volga delta commences, and large bodies of water flow in a south-easterly direction. The main navigation channel continues in a south-south-westerly direction past Astrakhan to the sea. From Astrakhan to the Bachtemirovsk branch there is usually a depth of 21 ft. of water. Lower the channel shoals to 8 ft., and continuous dredging is necessary to maintain even this depth.

The fleet of vessels on the Volga consists of steamers, sailing-vessels, and various types of barges and lighters. In 1909 there were 2,099 steamers and tugs, and 8,445 other vessels. The passenger boats of latest type are twin-screw vessels driven by Diesel engines. There are numbers of mixed cargo and passenger steamers engaged in local traffic, and many steam tugs. A large number of timber rafts are floated down the river, and one type of vessel, the *byelyana*, is built entirely of cut timber and broken up on arrival at its destination. Sailing-vessels are few in number and ply only on the sea reach.

The large craft known as "barges" account for 50 per cent. of the whole cargo-carrying fleet. The larger

examples of this type can only be used when the river is at its highest level in April, May, and June. During this period they may be able to make two and possibly three voyages from Astrakhan, after which they discharge into smaller vessels at convenience, or lie up till next season. This is apparently considered the most economical method of freighting, although the use of these deep-draught vessels entails their being idle for nine months in the year.

The Volga has many affluents, providing in all 3,870 miles navigable by steamers. The following list shows those on which there is steamer traffic:—

River.	Head of steam navigation.	Length navigable.
		<i>Miles.</i>
Mologa ..	Town of Vesegonsk ..	89
Shekhsna ..	Outlet of the White Lake ..	271
Kostroma ..	Mouth of Veksa ..	98
Unsha ..	Village of Ugori ..	99
Oka ..	Town of Byelev ..	797
Moksha ¹ ..	Village of Jergushevo ..	92
Klyasma ¹ ..	Mouth of Jesa ..	77
Sura ..	Village of Promseno ..	231
Vetluga ..	Town of Vetluga ..	215
Kama ..	Mouth of Vishera ..	759
Kolva ² ..	Mouth of Visherka ..	79
Silva ² ..	Town of Kungur ..	105
Byelaya ² ..	Town of Ufa ..	310
Vyatka ² ..	Town of Slobodskoi ..	475
Great Irgis ..	Town of Nikolaevsk ..	173

¹ Affluents of the Oka.

² Affluents of the Kama.

The most important of these tributaries is the Kama, which joins the Volga on the left bank between Kazan and Simbirsk. With its own four navigable affluents, the Kolva, Silva, Byelaya, and Vyatka, the Kama basin has 1,945 miles navigable by steam vessels. The Kama itself is a good river for traffic and has a deep channel with few obstructions. The Oka, with its affluents the

Moksha and the Klyasma, has in its basin 1,087 miles of water navigable by steamers, but it is much obstructed by shallows and rapids, and comparatively little use is made of it. The fact that a fairly close network of railways operates in its basin further reduces its value as an avenue of traffic.

The following table shows the principal ports on the Volga and their turnover in 1909 :—

			<i>Tons.</i>
Nijni-Novgorod	..	..	2,135,000
Tsaritsyn	..	..	1,656,000
Rybinsk	..	..	1,386,000
Saratov	..	..	1,075,000
Astrakhan	..	..	1,005,000
Samara	..	..	820,000
Kazan	..	..	748,000
Kostroma	..	..	359,000
Sysran	..	..	337,000

The basin of the Don has navigable waters, but their length and capacity bear no comparison with those of the Volga. The full length of the river is 1,325 miles. The climatic conditions are much the same as those on the Lower Volga, and a spring flood is followed by a period of low water from July to October, when navigation is frequently suspended.

The River Don is not favourably situated for navigation. Its course is very devious, and it has to compete with railways which connect the most important points by a much shorter route. The river itself, having been neglected since the beginning of the railway era, is in bad condition for shipping. The banks of the middle and lower reaches are treeless, and the current is continually breaching them and forming subsidiary beds, to the detriment of the navigable channel. The river is, however, suitable for floating timber, of which a considerable quantity is close at hand. Navigation is confined in general to the spring and early summer, when a good depth of water is usual. Steamers go up as far as Pavlovsk in Voronezh Government. There are three kinds of barge in use, which load up to 200, 160,

and 100 tons respectively. In the lower reaches down to Rostov a larger class of vessel is used, which can load up to 800 tons, but its use is restricted to the spring flood season. In 1906 the fleet of vessels was as follows: steamers 195, other vessels 471, rafts 951. The principal cargoes are breadstuffs and timber.

Recently the Don has been used for the transport of coal from the Donets region to Rostov. The Donets has been made navigable for barges up to 300 tons capacity by means of a system of locks, which was completed by 1914. A similar system was projected for the Don itself below Kalach, the most easterly point touched by the river, where it is only 40 miles from the Volga. The work was begun in 1914, but not much has been accomplished. This scheme is undoubtedly the forerunner of the long-projected Volga-Don canal, which would give an outlet for Volga and Caspian traffic to the Black Sea.

(c) *Canals*

A noticeable feature of the larger Russian rivers is the fact that in their upper reaches they approach one another fairly closely. Projects for joining different navigable rivers by means of canals have existed for that reason from ancient date. In the case of the Volga, the most desirable connections, as soon as the conquests of Peter the Great had given Russia an outlet on the Baltic, were with the Neva, which falls into the Gulf of Finland near Petrograd, and with the Northern Dvina, which has its outlet at Archangel.

Three systems for the connection of the Volga and the Neva were inaugurated and eventually completed in the nineteenth century. They are known respectively as the Marie, Tikhvinsk, and Vishnivolotsk canal systems. The two latter have been carried out on a small scale only, and consist mainly of canalized river, having only 4 and 19 miles of actual canal respectively. They are used by a small class of barge only, not by steam vessels, and are on the verge of becoming derelict. The Marie

system, on the other hand, was carried out on more ambitious lines, and provides an important waterway of which great use is made. The entire length of the system from Rybinsk on the Volga to Petrograd is 644 miles, of which 412 miles consist of navigable rivers, 187 of lateral lake canals, and 45 of locked canals. The route proceeds from Rybinsk in a north-west direction up the River Shekhsna, through the White Lake, and thence up the River Kovja to its highest point above sea level, where a canal section connects it with the River Wytegra, which falls into Lake Onega. The route then turns south-west and makes its way *via* Lake Onega, the River Svir, and Lake Ladoga, to Schlusselburg, whence the Neva flows through Petrograd, only 12 miles distant, into the Gulf of Finland. Thus a complete waterway exists between the Caspian and the Baltic, and at least one commodity, namely, naphtha, makes the entire journey regularly from the one to the other. The minimum depth is 6 ft., and vessels up to 230 ft. long, 28 ft. beam, and 5 ft. 6 in. draught, with a maximum load of about 800 tons, can use the route.

The journey from Rybinsk to Petrograd takes from 16 to 30 days. The principal cargoes transported consist, in addition to naphtha, of grain, ore, and iron. The traffic on the system amounted in 1907 to 1,200,000 tons and increased yearly up to 1910, when it reached 2,000,000 tons. The average cost of transport from Rybinsk to Petrograd was 6½d. per cwt., as compared with 9½d. per cwt. for the rail journey.

A canal system called the "Duke Alexander of Würtemberg" connects the basins of the Volga and the Northern Dvina. It branches off from the Marie system between Rybinsk and the White Lake, and passing through Kulinskoi Lake joins the River Suchona, which in its turn runs into the Northern Dvina at Ustyug Veliki. There are 20 miles of canal and 21 miles of canalized river, situated near the sources of both rivers in the provinces of Novgorod and Vologda. Only small barges use this canal, and there is no steam communication.

The high importance of connecting the Volga basin with other river systems than those already mentioned has led to a number of canal projects, many of them fantastically ambitious. A scheme to connect the Kama with the Siberian rivers Irtysh and Obi, by widening and making navigable the River Iset, was laid before the Imperial Duma in 1913.

The desirability of connecting the Volga and the Don, which are only 40 miles apart between Tsaritsyn and Kalach, has been self-evident ever since trade in the Caspian developed to a marked extent, and various offers have been made to the Russian Government to carry out this idea. The authorities, however, have never been willing to allow private enterprise to undertake work of such national importance, and the physical difficulties presented by the high land lying between the two rivers have been an obstacle to its realization; nevertheless, the project will certainly be carried through some day, either by the route mentioned or by a longer alternative route farther south.

(d) Railways

In order to consider the railway system of the Don and Volga basins, it is necessary to regard Moscow as its centre. No important railway begins or ends in the area itself and nearly all the principal railways pass through the country from west to east, radiating from Moscow.

Beginning in the north-east, the main line from Moscow to Archangel passes through the Governments of Vladimir and Yaroslav, touching the towns of Alexandrov, Yaroslav, and Danilov, and continuing to Vologda and Archangel. The distance traversed within the boundaries of the two Governments is about 229 miles. Another line, 273 miles in length, runs from Moscow to Nijni-Novgorod *via* Vladimir and Kovrov. All but about 45 miles of the total mileage lies within the Governments of Vladimir and Nijni-Novgorod. Between these two main lines lie two short connecting lines: (i) from Yaroslav in a south-east direction *via*

Ivanovo to Kovrov on the Moscow–Nijni line, and (ii) from Alexandrov on the Moscow–Archangel line in a north-east direction *via* Ivanovo to Kineshma.

The line from Moscow to Kazan runs due east *via* Murom, Arsamas, Jimiryasevo, and Alatyr. Of its total length of 599 miles, all but about 50 lie within the area of the Don and Volga basins.

The great main route from Moscow to Rostov-on-Don runs in a southerly direction, and from it branch off at different points all the lines running in an easterly direction, which will be subsequently mentioned. The principal junctions are: Ryazan, Ryashk, Koslov, Gryasi, Voronezh, Lisski, and Nikolskaya. This line in its southern section runs through the province of Voronezh and the Don Cossack territory for about 350 miles.

From Ryazan a line runs eastward *via* Troitsk and Simbirsk to Bugulma in the north-east corner of Samara. This line traverses the Governments of Simbirsk and Samara for about 300 miles. At the point where it enters the Government of Simbirsk, a line branches off in a south-east direction *via* Sysran, where it crosses the Volga on the longest railway bridge in Russia, to Samara, continuing thence as part of the great main route *via* Orenburg to Tashkent in Turkestan. This line runs for about 320 miles in the Governments of Simbirsk and Samara. From the town of Samara the main Siberian line runs eastward to Ufa, and thence over the Urals into Asia, traversing Samara for 160 miles.

From Ryashk there is a line *via* Morshansk, Pensa, and Kusnetsk to Sysran, where it joins the line last mentioned, after traversing the Government of Simbirsk for about 50 miles.

From Koslov a railway runs *via* Tambov and Vertunovskaya to Saratov. This line crosses the full width of the Government of Saratov, about 170 miles. From Saratov a line, about 250 miles in length, runs eastward to Uralsk, traversing the Government of Samara; and from Urbach on this stretch another line, about

350 miles long, runs due south *via* Baskunchak to Astrakhan. From Tambov a branch runs in a south-east direction *via* Balashov to Kamishin on the Volga, crossing the Government of Saratov for a distance of about 170 miles.

From Gryasi a railway runs in a south-south-easterly direction *via* Borisoglibsk to Tsaritsyn, traversing the Don Cossack territory for some 200 miles. From Tsaritsyn a railway, which may be considered a continuation of the above, runs in a south-south-westerly direction *via* Ilinskaya and Tikhoretskaya to Novorossiisk on the Black Sea. About 200 miles of this line are in the Government of Astrakhan and the Don territory.

Voronezh is connected with Kursk by a line of 150 miles in length running due west.

Lisski is the starting-point of a line which runs first due east and then north-east, crosses all the lines branching from the main Moscow-Rostov line, and eventually joins the Moscow-Samara line at Rusaenka. This line is a feeder to the lines it crosses, and, although described here as one railway, is rather a series of short connecting branches. Another branch from Lisski runs south-west to Kupyansk and the Donets.

From Nikolskaya a line runs due east to Tsaritsyn, traversing the Don territory for some 210 miles. Nikolskaya also has a branch to the west to Bachmut and the Donets.

Rostov-on-Don, the terminus of the main line which serves as a backbone for the lines so far described, is an important railway centre. A line runs from it due south to the Caucasus, another due west to Taganrog and thence north-west to the Donets coal and iron district.

The State has a strong hold over railway construction and management in Russia. A large proportion of the lines are both constructed and owned by the State, while those that are constructed and worked by private capital usually hold their property on terms which allow the State to buy them out at very short

notice, as has happened fairly frequently of late years. No foreign concessions have been granted in recent times.

The capital of the State railways has been found by a loan policy, a great deal of the stock having been taken up in Paris, London, and Amsterdam; Germany, on the other hand, fought very shy of the security. The share capital of the private railways has been subscribed to a considerable extent in Russia itself; but a large loan capital, mostly guaranteed by the Russian Treasury, has been placed upon the French, British, and Dutch markets. The rate of interest for all the issues mentioned is from 4 to 4½ per cent.

It is generally conceded that the railways of the area, especially those on the east side of the Volga, are not adequate to the traffic needs of the districts. A comparison of the number of lines lying east of a straight line drawn from Archangel through Moscow to a point on the Sea of Azov just west of the Don mouth with those lying to the west of such a line throws up in sharp relief the lack of facilities in the former area. The existence of a large navigable river with tributaries compensates for this to some extent, but the necessity for expansion of the railway system is obvious. The country east of the Volga is worst served. Till recently no bridge, except that at Sysran, crossed the Volga below Kazan, and even now above Kazan there is no bridge until Yaroslav is reached, a distance of over 300 miles.

It is true that the last twenty years have seen considerable railway expansion in Eastern Russia, but this has been rather with a view to exploiting Asiatic Russia than to consolidating local traffic. What has been considered a vital necessity for years still remains only a project—that is, the construction of a series of lines from the rich southern wheat-growing districts in a north-easterly direction to the agriculturally poor provinces, in order to ensure their annual supply of grain. At present, years of heavy surplus in the Ukraine may see an almost starving peasantry in the Volga and trans-Volga provinces.

The new railways sanctioned and in some parts under construction are as follows:—

(1.) A line crossing the Volga at Nijni-Novgorod and running in a north-east direction to a point on the Vologda-Vyatka railway west of Vyatka.

(2.) A line from Arsamas to a point on the existing railway west of Kazan which would cut out the present detour between Moscow and Kazan.

(3.) A line from Kazan eastward to the Urals, finishing at Ekaterinburg.

Of these lines, the first and last have in view long distance traffic and Asiatic connections rather than any improvement of local facilities.

(e) Posts, Telegraphs, and Telephones

The Russian Post Office undertakes most of the branches of postal service usual in Europe, including parcel-post, despatch of money through the post and by telegram, and the cash on delivery system. The most notable feature of its routine is the vast quantity of correspondence which is sent by registered post and insured post for greater security, even newspapers being frequently registered. The system of rural delivery is very poor; and in many provinces the *zemstvos* have secured permission to undertake this branch of the service in order to improve the inadequate facilities. A comparison of certain figures with those of the United Kingdom for the year 1912 shows the comparatively limited development reached in Russia:—

	United Kingdom.	Russia.
Expenditure	£24,000,000	£6,500,000.
Letters per head of population..	74	10
Number of post offices ..	24,000	16,000
Miles of telegraph line ..	81,000	124,000

Telephones were first instituted in Russia by private syndicates, usually of Scandinavian origin, which obtained concessions for urban areas. Latterly the State has taken over the provision of this means of communication, but has not been specially active in developing it. Consequently the *zemstvos* in many places have obtained concessions to exploit telephone systems in both urban and rural areas, which they have done with success.

(2) EXTERNAL

(a) Ports

(i) *Accommodation*.—*Taganrog* is the most important port on the Sea of Azov. The actual harbour close to the town is formed by two curved moles 600 yards apart, with an entrance between them 140 yards wide. An inner mole 200 yards in length encloses an area known as the Petrovski basin. There is a dredged channel 12 feet deep and 90 yards wide leading up to the harbour. The quay space is small, and the loading facilities are confined to two steam cranes. The great majority of the shipping using the port comes to anchor in the roads at distances varying from 25 miles to 10 miles from the town, according as the vessel draws the maximum depth of water possible in the Sea of Azov (24 feet) or less. Nearer the town there are from 14 to 18 feet of water. The depth is much affected by wind: a prolonged easterly wind has been known to diminish it by 7 feet. Foreign-going vessels load in the roads from lighters and local steamers, many of which come from Rostov.

Rostov-on-Don is 25 miles from the point where the river reaches the Sea of Azov by a number of mouths. Only two of these mouths are used for navigation—the Egurcha for shipping, and the Merinovoe for raft-floating. A channel $9\frac{1}{2}$ miles long and with a minimum depth of 14 feet has been dredged from the open sea to the Egurcha mouth, and a channel of the same depth has been maintained in the river as far as Rostov. There is a stone quay on the

river front, which is at present 2,800 yards long, and will be 4,300 yards long when completed. Loading facilities are said to be indifferent. An elevator, of 11,200 tons capacity, was completed in 1913. The trade consists of transit from rail or river vessels to lighters or local steamers, on which cargoes are carried to Taganrog roads, there to be loaded for abroad. Less than twenty vessels a year on an average come up to Rostov from foreign ports.

The port of *Astrakhan* is situated in the delta of the Volga, 71 miles from the open Caspian. Owing to the difficulties of navigating the delta in sea-going vessels, the larger incoming steamers, which consist mainly of oil-tank steamers from Baku, discharge their cargoes in a roadstead about 100 miles from Astrakhan town. There is practically a floating town in this roadstead, which is busy for six months of the year. It is provided with a customs house, hospital, telegraph office, provision stores, &c. The tank steamers discharge into shallow - draught steamers, which negotiate the difficult and tortuous delta waters up to Astrakhan, where a second transfer to river barges takes place. The Volga brings down enormous quantities of sand (an average of 100 tons is deposited in fifty days), and the navigation of the delta is dangerous, both on this account and also because of heavy and frequent north-west gales. Smaller steamers make the voyage right up to Astrakhan. The port work in Astrakhan is mainly done in mid-river, and loading facilities are not much in demand.

(ii) *Nature and Volume of Trade.*—The entrances and clearances of vessels at Taganrog in 1913 were as follows:—

Vessels.	Tonnage.	British Vessels.	Tonnage.
487	871,875	136	271,129

British vessels held the first place both in numbers and tonnage, the second and third places being taken by vessels under the Italian and Greek flags.

The imports and exports at Taganrog for the years 1911-13 were as follows :—

—	1911.	1912.	1913.
Imports in tons ..	14,095	15,346	16,401
" " value ..	£363,500	£313,700	£309,200
Exports in tons ..	1,850,000	1,490,000	1,939,000
" " value ..	£11,532,000	£10,632,000	£11,913,000

Hides constitute 50-60 per cent. of the imports, tanning materials 10 per cent., fruits, nuts, and dried figs 15-18 per cent. The exports consist almost entirely of cereals, and are composed of 60 per cent. wheat, 25 per cent. barley, and 8 per cent. rye. The remaining 7 per cent. consists chiefly of vegetable oils and oil cakes, also of caviare, which in occasional seasons reaches a high value.

The average annual weight of arrivals at Rostov from 1905 to 1909 was 209,000 tons, and of shipments from that port 113,000 tons. As the bulk of the goods are in transit to or from Taganrog roads, the classes of exports and imports can be inferred from those mentioned under Taganrog.

The port of Astrakhan is mainly concerned in the trans-shipment of naphtha from Baku into river vessels. The entries in 1913 consisted of 5,000,000 tons of freight, the great bulk of which was crude naphtha passing up the river in transit, and raw cotton from Central Asia. Some traffic in Persian fruits, carpets, &c., also in transit, takes place. The goods despatched amounted only to 500,000 tons, and consisted of timber, fish, and some manufactured goods, especially textiles.

(iii) *Adequacy to Economic Needs; Possibilities of Development.*—The port of Taganrog is in serious need of improvement, for its very important trade is

now carried on under unusual difficulties. A certain advance has been made in dredging the channel through the Strait of Kerch to a depth of 24 ft., which enables large vessels to enter the Sea of Azov. As long, however, as the loading of any vessel drawing more than 12 ft. of water must proceed in the open roadstead at varying distances from the harbour, the cost and risk of consigning *via* Taganrog will remain high, and delays will be frequent. There has long been a project for a deep-water channel up to Taganrog and thence up the Don to Rostov, and a survey was in progress in 1913. The most recent improvement has been the installation of a wireless system between the town and a fixed vessel in the roads, by means of which much delay is obviated, as questions of provisions, lighters, coal, stores, &c., can be quickly disposed of.

Rostov-on-Don is much handicapped as a port by the bad channel at the bar and up the river and by the lack of loading facilities. It is considered the most expensive port in Russia. Owing to its importance, improvements have long been promised, but beyond the construction of the quay on the river front, which is only partially completed, nothing has been done.

Astrakhan also suffers from a shallow and dangerous approach owing to the shifting sandbanks in the Volga mouths. The necessity for a deep and well-dredged channel is very urgent, and in 1914 a sum of £364,000 was assigned by the Imperial Treasury for this improvement alone. The avoidance of double trans-shipment of cargoes coming from Caspian ports for up-Volga destinations would prove of enormous benefit to the traffic and increase the value of the port.

From what has been said, it is obvious that not one of the ports in question is equal to the demands put upon it by the trade which it handles at present, and drastic improvements are necessary to bring risks and expenses to a level which will allow of proper expansion of trade.

(b) Shipping Lines

The only regular lines working in the Sea of Azov are two Russian companies, the Russian Steam Navigation Co. and the Volga Don Steamship Co., which run regular passenger and goods services in small steamers between Taganrog and Rostov and other Azov and Black Sea ports. All other traffic is carried in tramp steamers chartered as a rule for single voyages. They arrive mainly in ballast during the grain-shipping season.

Shipping in the Caspian Sea is entirely in the hands of Russian companies. The following figures show the numbers and tonnage of the vessels owned by the various companies:—

Owners.	No. of steamers.	Net tonnage.
Caucasus and Mercury Co. ..	39	16,504
Vostochnoe Co.	34	16,935
Nadejda Co.	14	7,875
Nobel Bros.	7	3,608
Other companies, trading firms, and private owners	185	80,074
Total	279	124,996

There are also 544 sailing vessels of 113,699 net tons plying on the Caspian.

The Caucasus and Mercury Co. had for some years been receiving an annual subsidy of £30,350, in consideration of a number of round voyages from Astrakhan to certain ports. On the expiration of the contract in 1914, they offered to undertake the same services at the rate of £67,620 per annum. Their offer was not accepted, and the contract was thrown open to tender. Six firms tendered, but no information as to the result is forthcoming.

The lines plying from Astrakhan appear to be equal to the trade offering; in fact, owing to the reduced

shipments of naphtha during the last few years, there has been no tendency on the part of the principal companies to increase their fleets. The necessity for a subsidy where no competition from foreign flags exists also points to a difficulty in providing full cargoes for regular lines.

(c) *Telegraphic and Wireless Communications*

There are no telegraphic cables from any of the ports. The important station of Kerch on the route of the Indo-European Telegraph Co. provides facilities for telegraphing eastward. There is also a cable from Baku under the Caspian to Krasnovodsk, whence land lines run eastward. Other telegraphic communication with foreign countries is conducted by means of the land lines of the Russian Post Office.

There is no wireless communication with foreign countries, but for local purposes a few stations have been set up, particulars of which are given below :—

Station.	Position.	System in use.	Radius.
			<i>Miles.</i>
Fort of Alexandrovsk	Eastern Caspian coast ..	Telefunken ..	160
Petrovsk ..	Daghestan coast ..	.. ..	160
Astrakhan roads ..	Western Caspian coast	.. ..	110
Taganrog town ..	Sea of Azov .. ..	.. ..	170
Taganrog roads ..	Sea of Azov .. ..	.. ..	110
Kerch	For official use only ..	No information.	

(B) INDUSTRY

(1) LABOUR

(a) *Supply of Labour; Emigration*

As in many other parts of Russia, there is not in the district under survey the marked distinction

between agricultural and industrial labour which exists in those countries where industry is older and more settled. Semi-annual migrations of labour from country to town and *vice versa* are the rule. Agriculture does not suffer from want of labour, as over 50 per cent. of the land is peasant-owned and worked by the owners and their families; moreover, the people of a commune assist one another at busy periods. Such privately-owned land as requires hired labour attracts it in summer without difficulty from the very large landless peasant class, which is accustomed to take to industry either locally or in the towns for the winter period, to be reckoned for this purpose as six to seven months of the year. Factory industry is accustomed to a shortage of hands in the height of summer and plentiful labour at other times. The only industry which suffers seriously from shortage of labour is that of coal-mining.

For a long period in the nineteenth century there was no emigration from the Don and Volga area; indeed, during the middle of the century, colonies were being established in certain districts east of the Volga, which were at that time virgin soil for agriculture. Immediately after the completion of the Siberian railway, there began a steady stream of emigration in that direction, which continued up to the outbreak of war, though on a diminishing scale after the rush of the first five years. Official figures show that between 1894 and 1912 3,500,000 Russians migrated to Siberia and settled there permanently. These nearly all came from the black soil and steppe regions, a very large proportion being natives of the region of the Volga basin.

There has been no notable movement of Russians from the Don and Volga area to the New World at any time.

(b) *Labour Conditions*

Conditions of climate and the present transition stage of agriculture and industry combine to make the

conditions of labour far less favourable in the Don and Volga area than in most parts of Western Europe, and even than in some more favoured districts of Russia itself. The increased agricultural population can no longer live entirely by the soil, and is forced to make long journeys in search of employment after the pressure of land work in the short summer is over. This means that a large population is virtually homeless all the year round, and is dependent for housing on its employers. Factory towns and villages always contain large barrack-dwellings put up by the factory owners. These were originally intended for males only, the women remaining behind in the villages. Where factory labour, however, is tending to become stabilised, as in Vladimir Government, living quarters arranged in a manner suitable for family life are gradually being established, but the fact that in general labour is migratory militates against good living conditions. Since 1882 the development of factory legislation has been very rapid; nevertheless the results are still considered to be behind those of Western Europe. The inspection districts are said to be much too large for the staff, and evasion of the law by employers is frequent.

Agricultural wages are steadily rising, as is shown by the figures given below, which also show that the average wage in the Don and Volga area is slightly higher than that in Russia generally. The figures refer to the wages paid at harvest time, those for seed time and hay harvest being 15-20 per cent. lower.

Wages for a day's labour in kopecks without food:—

	1901-10 average.		1914.	
	Man's.	Woman's.	Man's.	Woman's.
Don and Volga	90	53	110	73
Russia generally	80	54	102	68

Industrial wages in Vladimir, Yaroslav, and Kostroma are as a rule about 25 per cent. lower than the average in Russia generally for the same class of labour. In 1910 the average annual wage in Vladimir was 186 roubles, in Kostroma 177, and in Russia generally 244. In considering these figures it must be remembered that a large number of employees, as many as 42 per cent. in Vladimir, live in houses provided by their employers either free or at a rent which is at most 3 per cent. of their wages, and get certain lighting and fuel privileges. The provision of medical attendance and hospital accommodation, as also insurance against sickness and accidents among workmen, is compulsory on the employer.

Russian industry is admittedly founded on plentiful and cheap labour, the other two factors, capital and raw material, being generally dearer than in competing countries. As labour during the last decade has tended to become more stable and coalesce into trades unions, wages and conditions have improved somewhat, and hours do not appear to be excessive on the whole. The conditions of mining labour in Russia, however, are the least satisfactory of any in the industrial world. The mines in the area under survey are entirely situated in the Don Cossack territory, which supplies them with no labour except for haulage on the surface. The Governments of Smolensk, Orel, Kursk, Mohilev, and Simbirsk mainly supply the coal-miners, who are housed in large barracks, and, being a fluctuating population, are difficult to manage. Owing to bad living conditions epidemics are not infrequent. In 1910 an outbreak of cholera reduced the mining population of the Donets basin from 142,000 to 80,000 in a few weeks, as great numbers of those not attacked by the epidemic temporarily quitted the district. Many mining companies have endeavoured by bettering the conditions to keep their labour continuously, but the fact that applications have been recently made for convict labour shows that on the whole the conditions are bad.

(2) AGRICULTURE

(a) Products of Commercial Value

The amount of the produce of agriculture, together with the acreage under all the principal crops, is given in the Appendix (pp. 105-6), the figures being taken mainly from the year-book issued by the Russian Ministry of Agriculture in 1916. The conditions in different parts of the area are very diverse, partly owing to variations of soil and climate and to some extent owing to differing systems of land-tenure.

The important cereals, rye, wheat, barley, and oats come first under consideration.

Returns furnished for the period 1895-1912 show that the mean cereal harvest of the Don and Volga basins was 18 per cent. of that of the whole of European Russia. Statistics collected for the same period establish an interesting comparison as regards the degree of stability in the cereal harvest. In the Don area the mean annual deviation from a normal harvest figure reaches as high a percentage as 35.4; in the Lower Volga it is 30 per cent., and in the Upper Volga 22 per cent. In the Ukraine generally it is only 17 per cent., in the agricultural centre 15 per cent., and in all other agricultural units still lower. The high degree of instability in the Don and Volga area is caused partly by uncertain climatic conditions, but in view of the low figure of yield (see p. 69) and of the fact that many districts which are not favoured by soil or climate have a far greater degree of stability, it may be assumed that the farming method on the whole leaves much to be desired.

The principal grain-growing districts are the Don Cossack territory, Voronezh, Kazan, Samara, Saratov, and Simbirsk, in all of which there is more or less black soil. Nijni-Novgorod, Kostroma, Vladimir and Yaroslav have no black soil, and produce considerably less in the aggregate and per acre. Astrakhan has little land suitable to agriculture of any kind, and shows negligible returns under all heads.

Rye has the greatest absolute yield, and in most governments is the principal crop. It is the staple breadstuff of the masses, and the great bulk of the crop is absorbed in Russia. In very good years an export takes place.

Wheat runs rye close in absolute yield, but the crop is very unevenly distributed. The principal production is in the Don Cossack territory, where the best black soil favours it, and in Samara, which has also a large area of black soil, though of inferior quality. In the latter Government the existence of exceptionally large private estates, which grow for export, accounts for the predominance of wheat.

Barley is a much smaller crop; 36 per cent. comes from the Don Cossack territory, 10 per cent. from Voronezh, 5.7 per cent. from Kazan, Samara, and Kostroma, and the remainder from other Governments in uneven ratio. Barley is exported in fair quantities after the home demand is supplied.

Oats are grown in fairly even quantities over the area, but the acreage and crop are somewhat larger in Kazan than in any other government. The export of oats reaches about one-tenth of the total crop.

Millet is grown for home consumption in all Governments except Yaroslav and Kostroma. Saratov and Voronezh raise the largest crops.

Buckwheat is grown in Samara, Voronezh, Kazan, Vladimir, Nijni-Novgorod, and Simbirsk. The first two named contribute over 60 per cent. of the total. The crop is grown for home consumption.

Maize is grown only in the Don Cossack territory, and the amount is insignificant. The area under maize in 1914 was 93,400 acres, and the crop weighed 27,000 tons.

The remaining crops occupy a very small area in comparison with cereals.

Potatoes are grown on about a million acres in Simbirsk, on about half that area in Kazan, and on about a million acres in all in the remaining Governments. They are used in great quantities for the

distillation of alcohol, especially in Simbirsk and Saratov.

Peas, beans, and lentils are grown on about 150,000 acres in each of the Governments of Saratov, Kazan, and Nijni-Novgorod, and on smaller areas in the other Governments.

Flax and hemp are grown on about 100,000 acres in each of the Governments of Vladimir, Yaroslav, Kostroma, and Nijni-Novgorod, where the clayey and sandy soils and the climate favour these crops. All the remaining Governments grow some, but in smaller quantities.

A large *hay* crop is harvested in Samara and the Don Cossack territory, which are great horse and cattle-breeding Governments. Astrakhan also raises a good crop. The following table shows the crop in the various Governments :—

Government.	Average 1901-10.	Year 1914.
	<i>Tons.</i>	<i>Tons.</i>
Astrakhan	732,000	791,000
Don Cossack territory ..	1,235,000	1,127,000
Kazan	495,000	416,000
Kostroma	610,000	429,000
Nijni-Novgorod	396,000	322,000
Samara	1,205,000	1,263,000
Saratov	359,000	215,000
Simbirsk	242,000	187,000
Vladimir	593,000	409,000
Voronezh	500,000	376,000
Yaroslav	663,000	455,000

The proportion of agricultural land under pasture is estimated as follows :—Mid-Volga Governments, 11·8 per cent. ; Lower Volga Governments, 33 per cent. (this includes the vast area of permanent pasture in Astrakhan ranches by the Kalmuck and Kirghis); industrial Governments, 18 per cent. ; Don Cossack territory, 22 per cent.

Oil-yielding plants are raised principally in Voronezh, which in 1914 harvested 196,000 tons of

sunflower seed and 2,243 tons of colza seed. The sunflower is also cultivated in Saratov, where 92,000 tons of seed were produced in 1914, and in the Don Cossack territory, where the crop for that year was 33,000 tons. A great quantity of sunflower seed is eaten raw by peasants and workpeople.

Sugar-beet is grown exclusively in Voronezh. The average area sown in the years 1901-10 was 28,700 acres, and the crop realized 145,000 tons. Figures for 1914 show a heavy increase, an acreage of 47,700 yielding a crop of 286,500 tons.

Hops are grown in Kostroma. The yield in 1914 was 950 tons.

Viticulture has long been established in the Don Cossack territory, wine having been made there from the earliest historic times. The keen eye of Peter the Great noted that the soil on the banks of the Don and the shores of the Sea of Azov resembled that on the banks of the Rhine, and under his ægis the cultivation of grape vines received a strong impulse. In 1910 some 21,500 acres were under vines, mainly on the banks of the Don, Donets, and Aksai rivers. The yield of grapes was about 8,000 tons. The principal vineyards of repute are situated at Razdorsk, Kumschatsk, and Tsimlyansk. The yield of wine in 1914 was 310,500 gallons. In general the wine does not travel far afield, but is marketed and consumed locally.

Tobacco is grown in Voronezh and Samara. The quality is very coarse, and only provides what is known as *makhorka*, used by the peasants for smoking and as snuff. Voronezh harvested an average of 1,877 tons from 1901-10 and 3,097 tons in 1914. The corresponding figures for Samara were 2,220 and 1,290 respectively. Some very small results were obtained in Simbirsk and Saratov, but in the other Governments tobacco has quite died out as a crop.

The above account covers all the field crops in the area which receive official mention; any others are of very small account.

Vegetable and *fruit* culture on industrial lines are confined to a few Governments. In Simbirsk there are 18,000 acres of kitchen-garden land, cultivated by Mordvas, who are specially clever at this work. In Vladimir, in the neighbourhood of the factory-towns, kitchen-gardening is well developed and high rents are secured from the cultivators. Cucumbers and cabbages, which are both great articles in the Russian dietary, are principally raised. Fruit-gardening prospers in Saratov on the right bank of the Volga, where German colonists give much attention to it. Kazan has a great many fruit orchards, some of very large size, containing several thousand trees. Apples, pears, plums, cherries, and melons are principally grown. The fruit orchards of Vladimir are also noted, especially for cherries, which are preserved in large quantities. In Voronezh fruit-growing on industrial lines is increasing, but is as yet of only moderate importance.

The *live-stock* branch of agriculture presents many interesting features. The Volga basin several decades back was largely a pastoral country, but of recent years cultivation has gradually diminished the pastoral area. The following table shows the head of live-stock in 1913:—

Government.	Horses.	Horned Cattle.	Sheep.	Pigs.
Astrakhan ..	400,000	1,090,000	2,600,000	34,000
Don Cossack territory	918,000	2,152,000	1,727,000	527,000
Kazan	449,000	519,000	1,256,000	183,000
Kostroma ..	257,000	423,000	420,000	62,000
Nijni-Novgorod ..	241,000	322,000	406,000	85,000
Samara	979,000	929,000	1,437,000	189,000
Saratov	612,000	811,000	1,900,000	131,000
Simbirsk	303,000	321,000	751,000	86,000
Vladimir	215,000	390,000	299,000	79,000
Voronezh	582,000	781,000	1,403,000	228,000
Yaroslav	187,000	362,000	139,000	17,000
	5,143,000	8,100,000	12,338,000	1,621,000

In connection with the figures for sheep, it should be noted that out of the total number in Nijni-Novgorod 30,000 were fine-woolled sheep, in Astrakhan 216,000, in the Don Cossack territory 308,500, and in Voronezh 61,000.

As compared with the period 1905-1908, live-stock generally shows an increase in Saratov, Simbirsk, and Astrakhan, and a decrease in Nijni-Novgorod, Yaroslavl, Vladimir, and the Don Cossack territory. In proportion to the total quantity of live-stock in European Russia, the Don and Volga area is rich for its extent. It contains 22 per cent. of all the horses, 25 per cent. of the horned cattle, 30 per cent. of the sheep, and 9 per cent. of the pigs in the country.

Horses.—Samara and the Don Cossack territory have the largest stock of horses, close upon a million head each. These two Governments, together with Saratov, Simbirsk, and Astrakhan, are among the greatest horse-breeding centres in Russia. The bulk of the horses are bred for agricultural purposes, and have no special characteristics of interest.

Three breeds of steppe horses, the Don Cossack, Kalmuck, and Kirghis, are peculiar to their districts, and their improvement has been sought for some time past. The Don Cossack horse, originally a hook-nose breed of steppe horse, has recently been frequently crossed with English half-breds and thoroughbreds. A hardy, useful cavalry remount has thus been evolved, and 9,000 horses are taken yearly for military purposes from this source. There are in the province 127 *stanitsas*, or rearing centres, which have 30,700 mares and 1,860 half-bred stallions. There are in addition 145 stud-farms, with 22,000 mares and 1,600 half-bred stallions. Every farm in the Solski district, where breeding principally goes on, is bound to deliver annually from eight to fifteen remounts, at a maximum price of £17-£18 per horse.

The Kalmuck and Kirghis horses are bred on the plains of Astrakhan. They are small and ugly, but hardy, light, and fast. Crossed with good riding

breeds, they make excellent remounts. The nomad Kalmuck are said to be possessed of 30,000 mares. They keep their cattle and horses on the open steppe all the year round, and in severe winters their losses are serious.

In *horned cattle* the Don Cossack territory and Astrakhan easily lead the way, Samara, Voronezh, and Saratov following a long way behind. The Cossack cattle are mainly workers, and are used from 4 to 10 years of age for agricultural work, being then fattened for slaughter. Peasant farms among the Cossacks average eight head each. The Kalmuck cattle raised in Astrakhan west of the Volga are not suited for work, but are hardy and mature early for meat. The Kirghis beast is also a quick maturer and makes excellent beef; it is in addition a good draught animal.

Sheep.—Astrakhan has by far the largest number of sheep, Saratov, Don Cossack territory, Samara, Voronezh, and Kazan following next in order. The overwhelming majority of the sheep are of a coarse-woolled breed, known as the "Don" sheep, which has a low fleece value and not a very high slaughter value. The principal merino breeds are Electoral, Rambouillet, Negretti, and Infantado, but their numbers are decreasing everywhere. In Nijni-Novgorod there is a fine-woolled sheep known as the "Romanoff" breed.

Pigs are a small item, except in the Don Cossack territory, which in 1913 had 500,000 head out of 1,600,000 in the whole area. An improvement in the breed of pigs has been effected by the introduction of Berkshire stock.

Camels are bred to a considerable extent in Samara and Astrakhan as draught animals. There were 389,000 head in European Russia in 1912, the great bulk of which appear to have been in the Don and Volga area.

Poultry-breeding is confined to one or two special areas. Kazan and Simbirsk have a large egg trade, and foreign agents have an organization for securing

the supply, which is shipped abroad to a great extent. The Governments of Yaroslav, Kostroma, and Vladimir have an extensive poultry-fattening industry, which centres at Rostov in Yaroslav. The poultry industry is also well established in Voronezh, Simbirsk, and part of Nijni-Novgorod.

(b) Methods of Cultivation

Over a large portion of the Don and Volga area the three-field system of agriculture is practised, that is to say, the land is under a continuous rotation of bread-crops, with one fallow year in three. This system has little to recommend it, as it is exhausting to the soil, and, combined as it often is with a lack of artificial fertilization, represents that form of farming which necessity forces upon the peasant owner, whose holding is too small to allow him to practise a wider rotation so long as he is dependent upon his own produce for a living. The vicious circle is completed by the fact that the very land cultivated on this system is that which is in other respects poorly farmed, owing partly to the poverty and partly to the incapacity of the peasant. Although principally a peasant method, the three-field system, or at any rate a very exhausting rotation, is also in vogue with some private owners. On the Lower Volga, however, in the southern part of Saratov and the northern part of Samara, where large private estates prevail, a wide system of rotation with grass crops and the aid of artificial manure is practised. These lands raise more sheep and cattle, and the productivity of the land is fairly well maintained. The Don Cossacks are still somewhat primitive in their farming.

Part of the Don and Volga area is fortunate enough to be in the black earth region, which is naturally the most fertile soil on the globe. In Russia the belt of black earth is at its widest and best in the region to the south-west of the Don and Volga, known as the Ukraine, but the belt continues in an east-north-east

direction, and, interspersed with other soils, across the Volga, in places almost up to the Urals. The Don Cossack territory and Voronezh Government are all black earth, Saratov and Kazan mainly so. Samara has black earth in the north, clayey and sandy soils in the south. Simbirsk has some black earth interspersed with peaty and sandy soils. Nijni-Novgorod, Vladimir, Yaroslav and Kostroma are outside the black earth area, and their soils, consisting of clay, sand and peat, are in general of low fertility. Astrakhan, with its clayey and sandy soils and its large areas of salt desert, is also of low agricultural value. The black earth is lightly ploughed, horses being used, but in the other districts, which need very heavy cultivation, cattle are used for the weighty ploughs.

In general, even where other conditions are equal, the privately-owned land is more productive than that owned by the peasants for financial reasons, as the peasant owner under the commune has found the struggle increasingly difficult (see p. 73), and his resources in cattle and free capital ever dwindling. The backwardness of agricultural methods is shown by the yield of breadstuffs per *desyatine* (2.7 acres), which is 53 *puds* (1 *pud* = 36.11 lb.) in Kazan, Voronezh, and Simbirsk, and only 41 *puds* in Saratov, Samara, and the Don territory. In spite of the fact that these provinces are favoured by being almost entirely in the black earth region, the yield of 41 *puds* is the lowest in Europe.

(c) Forestry

The areas under forest and the incidence of ownership are given in the following table:—

Government.	Area under timber.	State.	Appanage.	Church.	Peasants.	Private owners.
	<i>Acres.</i>	<i>Per cent.</i>	Per cent.	Per cent.	Per cent.	Per cent.
Astrakhan	510,000	65	—	—	28	7
Don Cossack territory ..	675,000	—	—	13	79	8
Kazan	4,590,000	76	2	1	7	14
Kostroma	12,779,000	30	10	1	17	42
Nijni-Novgorod	4,827,000	30	7	4	10	49
Samara	2,816,000	32	20	1	22	25
Saratov	2,392,000	17	5	3	37	38
Simbirsk	3,250,000	11	55	0·5	3·5	30
Vladimir	3,153,000	17	11	—	12	60
Voronezh	1,185,000	23	0·5	1·5	49	26
Yaroslav	2,521,000	26	—	2	4	68

The total area may be roughly divided into three districts: (1) the upper reaches of the Volga and its affluents, which are rich in forests and which produce the principal building timber, such as pine and spruce; (2) the region of the middle course of the Volga, which is less well supplied and principally raises deciduous trees; (3) the lower reaches of the Volga and the Don Cossack territory, a very large area of almost treeless country. The first-mentioned district comprises the Governments of Vladimir, Yaroslav, Nijni-Novgorod, Kostroma, and Kazan. Vladimir has 28 per cent. of its area under forest, the others 33, 40, 61, and 33 per cent. respectively. The pine, birch, spruce, silver fir, oak, ash, and maple are the principal timber trees. The timber is floated down the Volga and its tributaries

in huge rafts, which require some scores of men to manage their navigation. The second district comprises Simbirsk, Samara, and Saratov, the first of which has 33 per cent. of its area under timber, the two latter 5 and 10 per cent. respectively. The oak, ash, elm, maple, lime, poplar, and aspen flourish here, the pine, birch and spruce being absent. The third region, comprising the Governments of Voronezh and Astrakhan and the territory of the Don Cossacks, is, with the exception of the northern portion of Voronezh, almost a treeless region. The latter Government has 6 per cent. of forest land, the Don Cossack territory 2 per cent., and Astrakhan $1\frac{1}{4}$ per cent.

The nineteenth century saw great colonizing activity in the region of the middle course of the Volga, with a consequent rapid reduction in the forest area. The resultant drying up of soil and climate called for legislation to arrest the depletion. In 1888 the State took forests generally under its protection, and all areas bearing marketable timber were scheduled and the exploitation regulated. The general principle is that fuel timber must be at least 40 years old at the time of felling and building timber 80 years old. A forestry staff, with inspectors and guards, has been established, but good authorities state that the law is much evaded, and that the process of depletion goes on still, if not so recklessly as formerly.

(d) *Land Tenure*

The ownership of land falls under three heads:—
(1) Peasant-property, assigned to this class in 1861 when serfdom was abolished, and universally described as *nadyel*; (2) land privately owned, mainly by the nobility, but in increasing quantities by successful and well-to-do peasants, merchants, and speculators; (3)

land owned by the State, the Imperial family, and the Orthodox Church and its monasteries.

The following table shows the percentage of each type of ownership in the various Governments :—

Government.	Area in thousand <i>desyatines</i> .	Nadyel.	Private.	State, Church, &c.
		<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Astrakhan	3,527	66·8	5·6	27·6
Don Cossack territory	14,075	70·0	16·5	13·5
Kazan	5,499	53·3	13·4	28·3
Kostroma	7,269	29·4	42·5	28·1
Nijni-Novgorod .	4,441	44·4	33·2	22·4
Samara	13,017	51·6	27·2	21·2
Saratov	6,799	49·2	38·7	12·1
Simbirsk	3,999	41·5	27·3	31·2
Vladimir	4,152	52·1	34·6	13·3
Voronezh	5,603	66·9	28·1	5·0
Yaroslav	3,069	46·3	43·2	10·5
Average .. ..	..	52·4	28·2	19·4

The *nadyel* constitutes over 50 per cent. of the whole available agricultural land, and is from the point of view of land-tenure the most interesting category. The law freeing the serfs in 1861 provided for the wants of the newly freed class by taking a proportion from the lands of the nobility and handing it over to the peasants on a deferred purchase system. Very little of the land was transferred to individuals, but almost all to communes, known as *mirs*, whose business it was to divide it up among the "souls," that is, adult males composing the commune. A system of periodical redistribution within the commune was provided for, but the law, broadly speaking, failed to provide for the expansion of population which took place, with the result that communal ownership had to fight against conditions gradually growing more adverse as time

went on. At each redistribution, owing to the expanding population, the amount of land per soul available became less, and from the very beginning it was apparent that the peasants were unable to keep up their purchase payments, which were eventually cancelled wholesale to prevent the complete bankruptcy of many communes. The system also was gradually but surely exhausting the fertility of the soil, as the sheer necessity of feeding himself and his family and paying his taxes forced the peasant to adopt a bad method of agriculture. All these considerations led to the carrying of a sweeping legislative reform in 1906, generally known as the Stolypin Land Law, which definitely abandoned the commune principle and sought to transform peasant-holdings into individual property. The administration of this change has been energetically pushed, and some £10,000,000 of State money had been advanced by 1913 for the purpose of effecting the change of method of ownership and improving the type of agriculture. Nevertheless, an acute land-hunger still existed among the peasants, as the emigration to Siberia in recent years plainly shows.

The privately-owned land was, up to 1861, almost all in the hands of the old landed nobility of Russia. The changes brought about by the abolition of serfdom were not necessarily to the disadvantage of this class, but, owing to their failure on the whole to grapple with the altered situation, they have in the intervening period parted with a good deal more of their land, and what remains is in a great number of cases heavily mortgaged. The purchasers of the land sold have been partly successful peasants, who have risen above their fellows, partly merchants and other urban people, who have seen fit to invest their accumulated capital in land for pleasure or profit.

The third category calls for small comment, being the patrimony of special classes of the community, handed over to them to provide them with income for the upkeep of their position, or for the maintenance of religious institutions.

In the Government of Astrakhan 37,000,000 acres, or about 63 per cent. of the total area, being unsuited to agriculture, has been assigned to the wandering Kal-muck and Kirghis, who ranch upon it.

In the Governments of Samara and Saratov over 4,000,000 acres are owned by colonies of Germans, descendants of immigrants who settled in these districts at the end of the eighteenth century and were granted free land and numerous privileges.

(3) FISHERIES

The rivers of the Don and Volga basins have always been extremely rich in fish, but their resources have been heavily drawn upon, especially during the nineteenth century, and the tendency has been for industrial fishery to move further down the rivers and concentrate in the lower reaches. In the case of the Volga and the Don themselves the fisheries of the affluents and upper reaches have long ceased to have any industrial importance, while the activity lower down has been intensified and the value of the catch increased in the aggregate.

The fisheries of the lower Volga and its estuary are among the most valuable in the world, and from Saratov to the Caspian the riparian population are engaged in fishing in an increasing ratio as the river approaches the sea. Originally the industry concerned itself almost exclusively with the fish of the sturgeon species, known locally as "red" fish, of which there are four varieties, the *beluga*, the *osetr*, the stellated sturgeon, and the sterlet. The ruthless destruction of these species in the nineteenth century, which took place as demand grew and proper regulation and preservation of the fisheries lagged behind, led to a serious reduction of the stock and a corresponding rise in price. Consequently other species, with which the river teems, but which were formerly of little market value, began to be fished for, and now form the substantial part of the

total catch. These are all known as "white" fish. Among the most important are roach, perch-pike or pickerel, bream, carp, knife-fish, pike, lamprey, and Caspian herring. The total annual catch of recent years has averaged about 320,000 tons, valued at over £3,000,000.

The price of both red and white fish is continually rising. The bulk of the catch is preserved on the spot, and eventually despatched to distant markets. Besides the actual fish, a number of by-products of great value are drawn from the industry. Caviare is made from the roe of a great number of fish, and commands a high price in all the great cities of Europe. The caviare of the *beluga* sturgeon fetches about 22s. per lb. at Astrakhan, that of other red fish somewhat less. The caviare made from white fish is sold for about 6d. per lb., and provides a cheap luxury for the working-classes. Isinglass, made from the bladder of the *beluga* sturgeon, *balik*, or dried sturgeon-back, and fish oil extracted from the Caspian herring, of which over 4,000 tons are caught annually, are other by-products of high importance.

Some 40,000 craft and over 100,000 hands are permanently engaged in fishing in the Volga delta and off the Caspian shore near the mouths of the river. From the delta up to Saratov a similar number of hands are employed. 40,000 workers are engaged in the preserving branch of the industry, also temporary hands, who appear in the height of the season and who consist largely of women and children. There are three annual campaigns—the "spring" campaign, from March 1 to May 15; the "hot" campaign, from July 15 to August 15; and the "autumn" campaign, from August 15 to December 6. Piece-workers earn 20-30 roubles per campaign, including board and lodging. Women workers on shore get 19-20 roubles, men 2-5 roubles more. The hours are long, averaging 15 per day in the autumn season. The organizations for carrying on the fisheries are generally *artels*, or

co-operative organizations of workers peculiar to Russia, conducted on a non-capitalistic basis. They vary in size and extent from those formed by the smallest number able to work a fishing-stand to large multiple concerns owning fleets of boats and working with a large staff. Capitalist syndicates also work in the industry, especially in the preserving branch, for which they buy up the catch of the smaller *artels*.

The fisheries are owned for the most part by various organizations, including the State (which has 144 reserves), municipalities, monasteries, and syndicates, while some are the property of private individuals. They are leased by agreements to the *artels* and fishing companies. The largest single reserve covers 78,500 acres.

The supervision of the fisheries employs a large staff engaged by the State Fisheries Commission. Their principal duties are to see that the close time (May 15 to July 15) is observed; that the fishing-stands are at least $1\frac{1}{2}$ miles apart, as prescribed by law; and that destructive methods of fishing and the capture of immature fish are prevented as far as possible. They are also responsible for keeping clear a large area at the navigable mouth of the Volga, which is buoyed for navigation, and generally for preventing poaching and trespassing.

The second important fishing area is that of the lower Don and the waters adjacent to the mouths of the river in the Sea of Azov. These fishing grounds are very ancient, and have always been of great value and importance. The slight salinity of the Sea of Azov enables river-bred fish to live permanently in its waters, and there is abundance of organic matter for the nourishment of fish life.

The varieties of fish do not differ greatly from those of the Volga, but are not so numerous. The sturgeon species is represented by the *beluga*, which is rare, and the *osetr* and stellated sturgeon. The white fish of most importance are the perch-pike or pickerel, bream,

carp, shad, and knife-fish. The average value of the catch for the years 1910-1914 was £100,000.

The ownership and regulation of the fisheries have been a source of violent dispute in comparatively recent times. The Don Cossacks, who inhabit the region, claimed absolute rights over the industry, and liberty to exploit it as they chose. With great difficulty the Fisheries Commission procured a settlement of the ownership questions, and secured the observance of close times to prevent the rapid destruction of stock. The close periods are March 15 to April 15, May 1 to June 15, October 1 to 7, December 25 to January 2, and all Sundays and legal holidays. The institution of these, together with the permanent closing of a large area at the mouths of the Don, has led to a remarkable increase in the stock of fish. The industry is carried on by large syndicates employing hired labour.

(4) MINERALS

The Don and Volga basins are not on the whole rich in minerals, except in the Don Cossack territory, where the eastern section of the rich Donets coalfield is situated. Iron, salt, and asphalt are worked, and a fair amount of limestone is quarried.

The total production of *coal* in 1910, which was slightly below normal, was 6,000,000 tons. The Don portion of the field is divided into four districts: (1) the Voronezh-Don district, which in 1910 had an output of 1,900,000 tons, of which 1,700,000 were anthracite; (2) the Makievsk district, which had an output of 718,000 tons, all bituminous coal; (3) the Kalmiusk district, which turned out 1,804,000 tons, all bituminous coal; (4) the Taganrog-Khrustalsk district, which turned out 1,600,000 tons in equal proportions of anthracite and bituminous coal. The Voronezh-Don district produced no coke, but the other three districts

produced 746,000 tons, of which the bulk was made in the Taganrog-Khrustalsk district. The number of workmen employed was 52,519, of whom 35,739 were underground workers and 16,780 surface workers. General figures for Russian coal mining in the Donets field show that the output per head per month is 12 tons. In Austria the corresponding output is 17 tons, and in Great Britain 23 tons.

Iron ore is found in the Governments of Nijni-Novgorod and Vladimir, the former of which has nine mines and the latter two. The ore is of poor quality, containing less than 50 per cent. pure iron, and the output also is small—71,600 tons in 1910, valued at £30,300. The total production of Russia in the same year was 5,600,000 tons.

There are numerous *salt* lake deposits in the Government of Astrakhan, the two largest of which are at Baskunchak and Elton. The output in 1910 was 412,000 tons. All the workings are State property, under the care of the Ministry of Agriculture, and are leased to syndicates.

Asphalt is found near Sysran on the right bank of the Volga. Six quarries had an output of 23,500 tons in 1910. The deposit is rich in bitumen, containing 30·5 per cent.

(5) MANUFACTURES

The manufacturing industry of the Don and Volga basins falls into two classes, factory industry and *kustarni* or peasant industry. It is worthy of special notice that in extent and value the latter is probably greater than the former, which is of comparatively recent growth, especially in the provinces colonized in the nineteenth century. The following table¹ shows

¹ From Annual Statistics (1912), issued by the Council of Representatives of Commerce and Industry.

the extent of factory industry in each government for the years 1906 and 1910:—

Government.	1906.		1910.	
	No. of establishments.	No. of workers.	No. of establishments.	No. of workers.
Astrakhan	221	10,659	143	6,947
Don Cossack territory	188	15,860	239	17,240
Kazan	157	14,450	164	14,416
Kostroma	219	75,481	234	87,755
Nijni-Novgorod ..	312	26,109	249	26,489
Samara	165	9,848	197	10,970
Saratov	261	20,038	283	23,112
Simbirsk	133	14,104	176	14,729
Vladimir	345	167,729	399	194,154
Voronezh	158	9,942	148	7,638
Yaroslav	184	32,638	190	34,863

In Astrakhan, the Don Cossack territory, Kazan, Nijni-Novgorod, Samara, and Simbirsk, most of the factories are small, but in some of the other governments there are works of considerable size. In 1910 Vladimir had more than 50 which employed 1,000 workers each, Yaroslav had 5 employing between them 18,037 workers, while in Kostroma 30 employed 60,568 workers. Though in Nijni-Novgorod most of the works are small, there were in 1910 2 large ones employing 11,328 workers, and in Simbirsk also there were 2 with over 1,200 workers each. Saratov had several factories of medium size and 3 large ones.

The principal centres of manufacture are in the Governments of Vladimir, Yaroslav, Kostroma, and Simbirsk, where the textile industries are predominant. In the other governments manufacturing industry is chiefly absorbed in the working of animal products, such as tanning, tallow-making, and soap-boiling.

Cotton-spinning, weaving, and dyeing are centred principally in Vladimir, which ranks second only to Moscow in these industries. The mills are fully up-to-

date in method. The article produced is generally of a coarse type, the finer kinds not being spun. The town of Ivanovo-Vosnesensk has the largest output, 17 factories being at work there, most of which use both spinning and weaving machinery and have their own dye-houses. Other centres of the industry are Pereyaslavl, Zalesk, and Shuya. Jurievets-Povolgsk and Kineshma, in Kostroma Government, and Yaroslav are also centres of cotton manufacture. The linen industry has its centres in the same Governments, and frequently in the same towns. Vladimir, Kostroma, and Yaroslav take rank, in the order named, in flax-spinning and linen weaving. The following tables give details of the cotton and linen industries:—

COTTON SPINNING AND WEAVING, 1910.

Government.	No. of factories.		No. of spindles.	Raw material.		Product.	
	Spinning.	Weaving.		Russian.	Foreign.	Yarn.	Cloth.
Vladimir ¹ ..	22	102	1,470,000	<i>Tons.</i> 38,000	<i>Tons.</i> 26,000	59,000	83,000
Kostroma ² ..	12	34	672,000	21,000	10,000	28,000	36,000
Yaroslav ³ ..	3	1	375,000	15,000	4,000	17,000	2,400

¹ 18 per cent. of total production of Empire of yarn, 30 per cent. of cloth.

² 3 per cent. of total production of Empire of yarn, 14 per cent. of cloth.

³ 5 per cent. of total production of Empire of yarn, 0.9 per cent. of cloth.

LINEN.

Government.	Spindles.	Looms.
Vladimir	100,239	3,293
Kostroma	113,801	4,919
Yaroslav	50,064	1,780
All Russia	408,693	15,424

No. of Mills.

Vladimir ..	25 flax, hemp, and jute mills	3 dye and finishing works
Kostroma ..	20 " " "	4 " " "
Yaroslav ..	5 " " "	— " "

The Government of Simbirsk is engaged in the woollen industry. The principal production is coarse cloth made from the wool of the native sheep, and the output is used for army purposes to a considerable extent. Merino wool is not much manufactured. The town of Simbirsk has eleven mills. Rummyantsev, in the district of Karsun, is another centre of activity.

A considerable silk-weaving industry, which draws its raw material from abroad, is established in Vladimir, where there are ninety-eight factories, mostly of small dimensions. The articles produced are mainly for peasant use, and consist of silk shawls and handkerchiefs. Mixed cotton and silk piece-goods are also produced.

Industries founded on the working of animal products are distributed over the area generally. Tanneries occupy the first place, every large centre of population having one or more. The refining of animal fats and the production of tallow, candles, and soap are particularly centred in Kazan and Rostov-on-Don. The large works of Krestovnikov in Kazan employ 2,000 hands, and Kazan soap is sold all over Russia and Asia.

Industries connected with and dependent on agriculture naturally occupy a prominent place. Of these flour-milling is the most important, as will be seen from the following table:—

Government.	Number of mills.	Turn-out of flour in thousand <i>puds</i> .
Astrakhan ..	436	2,435
Don Cossack territory	3,604	34,315
Kazan	4,061	26,655
Kostroma	2,319	10,213
Nijni-Novgorod ..	2,554	41,630
Samara	4,333	65,280
Saratov	2,364	79,400
Simbirsk	2,292	26,000
Vladimir	1,265	9,851
Voronezh	10,277	48,673
Yaroslav	1,333	17,635

A statement prepared by the late Minister of Finance, M. de Witte, showed that 40 per cent. of all the milling in European Russia was done in the Volga region.

Distilling is carried on partly as an adjunct to farming and partly in urban factories. Industrial alcohol distilled from potatoes forms the chief item of production, but a certain quantity is distilled from grain. The Don Cossack territory produces only grain spirit. The numbers of distilleries in each province in 1913-1914 were as follows:—

Government.	No.
Don Cossack territory	5
Kazan	21
Kostroma	11
Nijni-Novgorod	18
Samara	20
Saratov	41
Simbirsk	71
Vladimir	8
Voronezh	35
Yaroslav	6

Brewing is important only in Samara, Nijni-Novgorod, Kazan, the Don Cossack territory, and Astrakhan. The following table shows the production in each government in 1914:—

Government.	Gallons of beer produced.
Astrakhan	1,850,000
Don Cossack territory	2,200,000
Kazan	2,500,000
Kostroma	333,000
Nijni-Novgorod	2,700,000
Samara	4,700,000
Saratov	750,000
Simbirsk	219,000
Vladimir	31,200
Voronezh	373,000
Yaroslav	858,000

The industry appears to be declining, the breweries showing a decreased production in nearly every province of late years.

The Government of Voronezh possesses a beet-sugar industry. An annual average of 23,500 tons of raw

and refined sugar was turned out during the period 1909 to 1914, the greater part at the factory belonging to the Princess Oldenburg at Ramon, on the River Voronezh, a few miles north of the town of Voronezh.

Industries connected with the working of metals are poorly represented, the mineral resources being small. There are eight ironworks in the Ardatov district of the Government of Nijni-Novgorod, and two in the Murom district of the Government of Vladimir. In 1910 the production of pig-iron was 42,000 tons, and of manufactured iron, principally in the shape of iron bars, 7,000 tons. The industry employs 5,800 people. There are also ironworks in the Don Cossack territory near the anthracite mines.

Machinery manufacture is not conducted on a large scale. A certain amount of agricultural machinery is produced mainly in small works in the town of Rostov-on-Don and the Don Cossack territory; but the value of the whole output, £351,700, is only a small fraction of the total for European Russia and Poland, viz., £5,800,000. The following table shows the production from each government:—

Government.	Value.	No. of Works.
	£	
Astrakhan	—	—
Don Cossack territory	200,000	15
Kazan	7,000	5
Kostroma	1,200	6
Nijni-Novgorod	6,000	9
Samara	45,000	10
Saratov	5,700	20
Simbirsk	2,800	3
Vladimir	44,000	20
Voronezh	34,000	11
Yaroslav	6,000	6
Total	351,700	105

Other works for machinery and metal manufactures are not numerous. The Sormovsky works in the Balakhinsk district of Nijni-Novgorod make goods-waggon and petroleum cisterns. The Juralev works at Yaroslav turn out machinery valued at £134,000 per annum.

Iron and steel shipbuilding is centred in the Government of Nijni-Novgorod and the town of Astrakhan, as well as at Samara and at Spassky Saton in Kazan Government. The last-mentioned yard has the greatest output. It is the property of the Caucasus and Mercury Steamship Company, and most of the luxurious passenger vessels plying on the Volga are constructed there, as well as oil-tank vessels for Caspian traffic.

There is a cement factory near Saratov, whose annual production may be estimated at about £25,000.

With the exception of a small production of glass, pottery, paper, and twine, the above exhaust the category of factory industries.

Kustarni industries are active, varied, and extremely valuable in nearly every government. The goods produced are frequently made for distant, especially Asiatic, markets. Each government has its characteristic *kustarni* industry, and it is of interest to enumerate these.

As in factory industry, Vladimir occupies first place, with a varied category and a large output, whose value is estimated at one-third of that for the whole of Russia. Cutlery, nail-, chain- and lock-making, furdressing, wood goods, ikons, sheep-skins, gloves, and toy-making are the principal items. The pottery work of Gyelov district is noted. A certain amount of *kustarni* cotton spinning and weaving is done in this government, as also in Kostroma and Yaroslav, the workers in this branch being partly dependent on the allied factory activity. As carpenters and masons, and especially as iron-roof makers, Vladimir craftsmen are employed all over Russia owing to their special skill.

These industries are also well developed in Nijni-Novgorod. Cutlery, nails, chains, and locks are manufactured from local iron. Articles are made of soaked bast and lime bark, especially at Arbatov and Semenov, which produce over £20,000 worth per annum. A speciality is enamelled wooden spoons for export to the Far East. These are often very elaborate articles, and much labour is spent upon them. Some 120,000,000 are turned out annually. Willow baskets, principally packing hampers, and fishing-nets are also specialities. Nijni nets are in great demand on the lower Volga. Lace-making, shoe and harness work, and tar and resin preparation complete the list.

Yaroslav has the same industries as Vladimir.

Kostroma is noted for its felt boots and other felt goods, the manufacture of which is an offshoot of the factory woollen industry.

Simbirsk has not very much *kustarni* industry, but turned wooden goods, bast goods, and shoes are made in the government.

Kazan has several industries peculiar to it. Cart and sledge makers send their products all over Russia, as also do the makers of wicker furniture. A special kind of morocco leather shoe is made in the vicinity of Kazan city for export to Asia; 3,000,000 pairs, valued at £500,000 sterling, are made annually.

Saratov produces sheep-skins and unwoven woollen goods, and especially carpets, which are made near Tsaritsyn. The German colonists in this government work at cotton-weaving, their output being valued at £200,000 annually.

In the Governments of Samara, Astrakhan, and Voronezh there is a less noticeable development of *kustarni* industries, and in the Don Cossack territory they are entirely absent.

It is not possible to go into figures in reference to *kustarni* industries, but the collective value of the pro

ducts is very great, and it must be understood that only the purely industrial production is referred to, such articles as are made for domestic use and not sold not being included. The Government realizes that, owing to climatic conditions and the present position of agriculture, it is vitally necessary for the rural population to have a form of industry to fall back on, and supports the *kustarnis* by various methods, such as the provision of cheap raw materials, the placing of Government contracts for naval and military requisites, and the payment of instructors. In 1910, £84,800 was spent on the latter.

The chief weakness of the *kustarni* industry lies in the fact that the finished article is often parted with too cheaply for lack of proper touch with the market and resold at excessive profit. In order to avoid this, a central association was formed by the *zemstvos* in 1913 for the marketing of *kustarni* wares. This association has opened shops in large centres both at home and abroad, and taken other measures to ensure that an adequate portion of the price paid by the consumer finds its way to the producer.

(6) POWER

As the area of the Don and Volga basins is mainly an agricultural district, the question of the provision of power is not at present important. In the industrial district in the provinces of Yaroslav and Vladimir there is, however, an opening for the supply of electricity for power from central power-stations. The use of the rivers for water-power is entirely precluded, not only by the weakness of the current owing to the slight fall in level, but also by ice in winter and drought in summer. Any scheme for the provision of electrical power for industrial use would, therefore, apparently be dependent on steam for its generating force.

(C) COMMERCE

(1) DOMESTIC

(a) Principal Branches of Trade

Commerce in Eastern Russia generally is at an early stage of development. Communications have until recently been very defective, especially on the east bank of the Volga, and commodities have only worked their way slowly to market. Fairs have in many cases absorbed the commerce of considerable areas. A large proportion of the wares, especially textiles, produced in the industrial Volga provinces, finds a market in Moscow or at the Nijni-Novgorod fair.

The principal articles of trade are the raw and partly manufactured products of agriculture, forestry, and fisheries. Among these grain occupies the first place. There has been up to the present a serious lack of suitable markets for grain. Samara on the Volga and Rostov-on-Don receive great quantities, owing to their position as river ports, but in grain-growing centres on the whole the trade is in a radically defective state, owing to inadequate and unsuitable storage facilities. The grain silo or elevator has only recently come into use in the best-equipped seaports for the convenience of oversea trade, and this device for storing grain has hardly made any headway in the interior of the country. As a result of the lack of storage room, grain was formerly forced upon the market immediately after the harvest, and sold for export as the easiest method of realization. Consequently, a shortage was often felt a few months later in the very districts which had unloaded great quantities. This wasteful method of commerce was so plainly disadvantageous to the trade that the State came to the rescue. The State Bank helped financially to the best of its ability by making loans on grain in store, but was obliged to have recourse for the purpose to the intermediary of local credit institutions, which often found themselves in difficulties owing to the

wide and rapid fluctuations of the market. In the matter of improved storage facilities the State had in hand extensive schemes for elevators, which were to cover the whole of the grain-growing provinces. A start was made with a plan for eighty-four elevators to be built in the trans-Volga grain region and in the Saratov, Voronezh, Tambov, Pensa, and Simbirsk Governments, to be followed by others in different parts of Russia and Siberia. The eighty-four mentioned were to hold 1,000,000 tons of grain, and about twenty of these were ready or approaching completion when war broke out. If the proper value of the grain raised in Russia is to be realized by the growers, the completion of these elevator schemes is a matter of urgent necessity.

The trade in oil-seeds centres in the towns of Kostroma, Samara, Tsaritsyn, and Astrakhan, and for export purposes in Rostov-on-Don and Taganrog.

Flax is marketed at Rostov (Government of Yaroslavl), Rybinsk, Melenky, Kostroma, and Voronezh. Hemp is specially dealt in at Great Beresniki, in Simbirsk Government.

Animals and animal products are the next most valuable commodities. Live-stock is mainly disposed of at the fairs which are mentioned below (p. 91). Wool and hides also find their market principally in the same way. Animal fats and oils, tallow, &c., come to market in Saratov, Kazan (where there is a great soap industry), Tsaritsyn, Voronezh, and Rostov-on-Don which is the great export wool-market of South Russia.

The central market for fish is Tsaritsyn. The produce of the Lower Volga and Don fisheries is distributed from there.

Live poultry and geese are disposed of centrally at Saratov, and there is a big market at the town of Krasnoi-Yar near by.

Timber is partially disposed of at fairs, especially at the noted one of Kosmodemyansk. Otherwise Kostroma, Nijni-Novgorod, Tsaritsyn, and Rostov-on-Don (for export) are the usual markets.

(b) Towns, Markets, Fairs, &c.

Those towns which are devoted to the marketing of some special product of the surrounding area, or which receive and distribute owing to their situation on the Volga, have been mentioned in the foregoing section.

A few towns are engaged in general trade, especially with Asia. Kazan is a mart for exchange between east Russia, Turkestan, and Persia and the country west of the Volga. The Kazan merchants are chiefly Tatars, and their transactions penetrate far into Asia.

Samara is also interested in Asiatic trade, owing to its situation on the route between the Russian industrial districts and Siberia and to its additional advantage of being a first-rate river port.

Saratov also owes a flourishing trade to its position on rail and river. Its merchants act as the intermediaries between south-east Russia and the central provinces.

Nijni-Novgorod has a large trade with the East apart from its fair. It deals in the products of the *kustarni* industries of several neighbouring provinces. These consist of cutlery, leather, felt, woollen, and wooden goods.

The transit trade of Tsaritsyn is very great, as it lies at the point where the Volga and Don most nearly approach one another, the distance between them here being only 40 miles. The transfer from river to rail and *vice versa* in Tsaritsyn is very active. It is a great storage centre for petroleum moving northward or westward on its way from the Caspian; and fish, timber, wool, oil-seeds, and cattle are distributed through it.

The fairs of the Don and Volga regions are numerous. In the present phase of commerce they represent the largest market in the area, and have almost a monopoly in the commercial transfer of certain commodities. The annual fair at Nijni-Novgorod stands out above all others in the volume of

its business, in the variety of its frequenters and their dealings, and in its romantic and historic interest.

The existence of an annual fair on the banks of the Volga for the exchange of products between east and west dates far back into the Middle Ages. The original seat of the fair was Kazan, whence it was transferred to Makariev, on the Volga, some 30 miles below Nijni. In 1817 it was transferred to Nijni on account of a fire, and probably also because the situation of this town at the confluence of the Oka and the Volga, and its near proximity to the confluence of the Volga and Kama, make it the centre of an extensive system of inland navigation, which connects it with all parts of the Russian Empire.

The number of visitors to the fair is not easily calculated, but it is estimated that in the busiest period as many as 400,000 people, representing a motley variety of European and Asiatic nationalities, are to be found in the precincts. The character of the fair has changed much of late years. Formerly tea, raw cotton, furs, and skins were the chief articles of commerce; now hides and cotton and woollen manufactured goods come first, while the fur trade is almost disappearing, and tea and raw cotton have become of very small importance. The fair has recently developed another side, which is growing in importance from year to year. It has become a great financial settling centre and a rendezvous for the conclusion of trade contracts. It serves in the nature of a clearing bank for people from all parts who are not accustomed to ordinary bank transactions in their commerce.

The fair lasts from July 28 to September 7. The busiest period is during the first and second weeks of August. The last day of the fair is a legal settling day, when all bills given during the fair become due.

The high-water mark of the fair was reached in the period from 1880 to 1884, when the average turnover was £21,500,000. For the period from 1892 to 1896 the average had sunk to £17,000,000. In 1910 the turnover was £15,900,000, which was 15 per cent. less

than in 1909. It is not likely that the fair will ever regain its former prosperity, and it is thought that in future its activities will be concerned more with Asiatic Russia and less with southern Asia and China than formerly.

Nijni also has a horse-fair in June, and one for the sale of *kustarni* wooden goods in January. The latter is held upon the frozen surface of the River Oka.

There are many other fairs of importance in the Don and Volga regions, of which details are given in the following table:—

Place.	Government.	Name.	Turn-over.	Commodities.	Date.
Akhunsk ..	Astrakhan	Khanskaya	£ 160,000	Cattle, leather, and manufactured goods	May 9-25
Krivoroshkaya	Don ..	Troitskaya..	250,000	Cattle, corn, wine, colonial and manufactured goods	Trinity
Urupinskaya	Don ..	Pokrovskaya	110,000	" "	Sept 25, for 1 month
Kosmodem'yansk	Kazan	Lesnaya ..	200,000	Timber	May 25 to July 25
Laishev ..	Kazan ..	Karavanaya	116,000	Iron and metal goods	May 28 to June 11
Bugulma ..	Samara ..	Vosvishdenskaya		Manufactured goods, horses	Sept 14-26
Simbirsk ..	Simbirsk	Sbornaya ..	400,000	Manufactured goods, leather, wool and cattle	14 days in Lent
Rostov ..	Yaroslav	Rostovskaya	144,000	Agricultural products, seeds, iron goods, wooden utensils	18 days in Lent

Two large horse-fairs are held in spring and autumn respectively for the disposal of the Kirghis horses bred by the Bukeev Orda ("Inner Horde"). There are also noted horse-fairs at Simbirsk, Samara (three annually), Bugulma (two annually), and Novousensk (Astrakhan).

A great deal of trade is done at small local fairs. Small merchants transport stocks of goods from one fair to another. There are fifty-two such fairs in the Don territory alone.

(c) *Organizations to promote Trade and Commerce*

As has been indicated above (p. 87), commerce generally in eastern Russia suffers from want of organization. Interests have not as yet reached that pitch of cohesion at which the need of centralization is felt. Chambers of commerce exist at Astrakhan, Kazan, Rostov-on-Don, and Saratov, which are the towns where commerce has developed most on modern lines. There is also an exchange at Rostov-on-Don. A great deal of the commerce is in the hands of Tatars and Jews, whose racial freemasonry supplies an unofficial organization in itself. In the provinces where there are *zemstvos*, these organs of local government have entered deeply into the organization and even the promotion of trade. Their activities in connection with the trade in *kustarni* wares have already been mentioned (p. 86). They also in many places take active part in the trades directly connected with agriculture, such as those in seed, pedigree stock, and agricultural machinery.

An organization peculiar to Russia is the *artel* or workmen's syndicate. It is a very elastic combination, usually without capital, and is based on the principle that all members are workers and have equal rights in the organization. In the main *artels* are concerned in industry, but they are also formed for commercial aims, and the development of organization in trade will in future very possibly be to some extent in their hands. They are easily formed and as easily dissolved when their immediate object is attained, and thus provide a very cheap and flexible form of organization.

(d) *Foreign, especially British, Interests*

Foreign interests in the Don and Volga regions are very slight. Agriculture is in no way touched by outside capital or management. In industry foreign

capital has a little influence, more particularly in the coal-pits and iron-works of the Don anthracite region, but the textile industries are entirely Russian, except for the employment of technical staffs from various foreign sources. In commerce foreign interests are equally absent, except in a small degree in the transport of petroleum.

On the whole the region lends itself very little to exploitation from outside. The forests are not now as extensive as formerly; the geological formation does not encourage the expectation of the discovery of valuable minerals, and, except in the Don mining districts and the Upper Volga textile districts, such industry as may be expected to develop will be based on agricultural and pastoral activity, which have no attraction for the foreigner. The export and import trade appears to be the only field open to the latter.

(2) FOREIGN

(a) Exports

Quantities and Values.—No separate figures are given in the export statistics for the different provinces or regions of Russia, and information can only be furnished in the form of an estimate based on the probable share of any region in the total export. Russia's greatest export of value consists in cereal foodstuffs, and probably not much less than one-half of the amount exported comes from the Don Cossack territory and the Governments of Voronezh, Samara, Saratov, and Kazan. A small share of the great export trade in eggs falls to Kazan and Simbirsk, and Yaroslav, Kostroma, and Vladimir export poultry. Caviare from the Volga and Don fisheries is normally exported to the value of £350,000 a year. Linseed and flax, hemp and tow are exported from the more northerly regions, while the southern Governments, except Astrakhan, contribute largely to the consider-

able export of oil-cakes from linseed, hemp seed, sunflower seed, and rape seed. The cattle areas, Astrakhan, Samara, and the Don Cossack territory, export great quantities of hides, and wool despatched from approximately the same areas to Rostov makes the latter the largest wool-exporting port in Russia. Textiles are exported from Vladimir and Yaroslav, and anthracite from the Don region. Other items of export in which the area takes its share are horse-hair, bristles, vegetable oils, wooden wares, and leather goods.

Countries of Destination.—A large proportion of the Don and Volga exports goes to various Asiatic countries. Turkestan, having placed a large area under cotton, is now dependent on Russian breadstuffs to make good the deficit created. From the Don region wheat and barley are exported in normal times *via* Taganrog to Great Britain, France, Italy, and Germany, the latter receiving its supply largely through Rotterdam, which accounts for Holland figuring as a large importer. Other foodstuffs exported go mainly to Great Britain and Germany. Linseed and flax go chiefly to Great Britain and in smaller quantities to Belgium, Germany, and France; 80 per cent. of the hemp and tow goes to Germany, Great Britain taking nearly all the remainder in the case of hemp, and Austria some of the tow. Great Britain takes one-fifth of the linseed cake, Germany one-third, Belgium, Holland and Denmark the bulk of the remainder. Hempseed cake goes almost entirely to Germany and Denmark. Sunflower-seed cake goes to Denmark, Germany, and Sweden. Great Britain is the principal importer of rape seed, France and Germany together taking about the same quantity as that country. Finland is the principal customer for linseed oil, taking nearly all that Russia has for export, as well as a large proportion of the hemp-seed oil. Austria takes a share of the hemp-seed oil and sunflower-seed oil also, but the bulk of the latter goes to Turkey and Rumania. Unclassified vegetable oils are nearly all absorbed by Finland.

Germany is the largest importer of hides, Great Britain and Denmark following next in order, but of recent years the export to the United States has expanded remarkably. Sheepskins are mainly exported to Germany, Great Britain and the United States taking the next largest quantities. The coarse wools go to Great Britain, America and Germany in about equal quantities on an average, but with great variations in different seasons. The same may be said of merino wool, though American takings have been especially heavy of recent years. Great Britain takes the bulk of the camels' hair. Horse-hair goes principally to Germany and Austria, and in a lesser degree to Great Britain. The best caviars go to Germany and France, the cheaper varieties to Turkey and Rumania. Cotton textiles are exported to Siberia and other parts of Asia from the industrial provinces. The export of leather goods and wood wares, both of which are the product of *kustarni* industry, is also in the Asiatic direction.

(b) Imports

Quantities and Values.—The Russian import list, consisting as it does principally of manufactured articles, is very varied, and it is not possible to trace the destination of goods to definite provinces or areas. Only general conclusions can be drawn. Imported agricultural machinery is undoubtedly much used in the whole area of the Volga and Don. Of raw material for industry, cotton, cotton-yarn, and silk are imported, as are also most of the chemicals and dyes. Of the miscellaneous manufactured articles, especially such as partake in any way of the nature of luxury articles, a small quantity only finds its way to the area under survey, as there are few considerable centres of population, and the great bulk of the population, being of the peasant class, has small purchasing power and no surplus for imported luxuries.

Countries of Origin.—The agricultural machinery imported comes from America, Great Britain, and Germany. American harvesting machinery is in great demand. British threshing machinery, locomotives, and elevators have a strong hold. German ploughs and smaller machinery have been much imported, but meet with strong competition from native makes. Machinery for industry is mainly British or German. The cotton required for industry comes partly from Turkestan, which has latterly become a great growing area, partly from America, and in smaller quantities from Egypt. Chemicals and dyes for industry are of German origin.

(c) *Customs and Tariffs*

The general Russian tariff, both on manufactured goods and on most raw materials, is strongly protective. Where possible, goods are assessed by weight and not by value. The tariff contains 218 schedules, with many sub-classifications.

There is a short free list, which consists principally of the more complicated kinds of agricultural machinery, live cattle, horses, and cattle food made from the by-products of manufacture.

Low duties are placed on certain artificial fertilizers and on chemicals necessary for tanning and other industries.

(D) FINANCE

(1) *Public Finance*

The revenue of the Russian Empire is almost entirely raised by indirect taxation, only some 6-7 per cent. being derived from direct taxes on land, industry, and capital.

The total revenue of European Russia was 1,908,779,000 roubles in 1906, and 1,522,865,000

roubles in 1910. The contributions made in those years by the Don and Volga governments were as follows:—

Government.	Revenue in thousand roubles.	
	1906.	1910.
Astrakhan	10,969	13,336
Don Cossack territory	37,614	46,156
Kazan	15,318	20,442
Kostroma	11,994	12,991
Nijni-Novgorod	17,735	18,997
Samara	17,689	32,242
Saratov	27,870	33,425
Simbirsk	10,013	13,487
Vladimir	15,898	15,990
Voronezh	18,731	23,327
Yaroslav	18,501	16,228

For provincial purposes the *zemstvos* raise considerable sums in taxation. Over 50 per cent. of their revenue is derived from direct taxation on land and buildings. Licences and taxes on capital also account for a good proportion of the total. The *zemstvo* expenditure is of two kinds, obligatory and optional. Local administration, justices of the peace, posting-stations and maintenance of post-horses, recruiting stations for the army, police quarters, &c., are among the principal items which are obligatory, while expenditure on public instruction, medical and sanitary measures, roads and bridges, and insurance against fire and flood is optional. The fiscal unit of the *zemstvos* is the district, and the district *zemstvo* sends delegates to the provincial *zemstvo* council. The ability to raise revenue varies very much in different *zemstvos*. Some have entered on an ambitious loan policy and are active in trade, but in general their budget is restricted and their activities are much hampered for lack of funds. Nine of the eleven Don and Volga Provinces have *zemstvos*. Astrakhan, being

largely inhabited by nomad Kalmuck and Kirghis, is not suited to the institution. The Don Cossack territory was granted a *zemstvo*, but the Cossacks finding it unsuited to their semi-military organization, and suspecting that it cost more than it was worth, petitioned the Tsar to be relieved of the burden of maintaining it, and their request was granted. The following table shows the revenue of the *zemstvos* of each government in 1906 and 1910:—

Government.	Receipts in thousand roubles.	
	1906.	1910.
Kazan	3,029	3,517
Kostroma	3,030	4,624
Nijni-Novgorod	2,951	3,884
Samara	4,720	6,666
Saratov	3,991	5,092
Simbirsk	2,153	2,699
Vladimir	3,428	4,731
Voronezh	3,658	5,716
Yaroslav	2,268	3,422

The indebtedness of the provincial and district *zemstvos* in July 1909 was as follows:—

	Roubles.
Kazan	568,000
Kazan District <i>zemstvos</i>	15,500
Kostroma	763,000
Nijni-Novgorod	1,224,000
Nijni-Novgorod District <i>zemstvos</i>	70,000
Samara	2,966,000
Samara District <i>zemstvos</i>	119,000
Saratov	1,714,000
Saratov District <i>zemstvos</i>	237,000
Simbirsk	1,352,000
Simbirsk District <i>zemstvos</i>	115,000
Vladimir	544,000
Voronezh	1,102,000
Voronezh District <i>zemstvos</i>	91,000
Yaroslav	764,500

There are thirty-two towns in the Don and Volga area which have an urban administration, and are entitled to raise money within their boundaries for civic administration. Of these only seven have a budget of over 1,000,000 roubles, namely, Nijni-Novgorod, Rostov-on-Don, Samara, Saratov, Tsaritsyn, Astrakhan, and Kazan. The smallness of the budgets and of the indebtedness of the towns in general is accounted for by the fact that they do not as a rule construct or administer public utility works, such as water supply, lighting, and tramways, but allow them to be exploited by private companies.

The commune or *mir* has also taxing powers for the upkeep of local institutions, local roads and bridges, maintenance of storing places for grain, and other rural needs. There is much obscurity and irregularity in the collection and disbursement of these taxes, and no data are forthcoming in reference to them.

(2) *Currency*

The Russian currency is on a gold basis. The rouble is the unit, and is divided into 100 kopecks. The pre-war exchange value of the rouble was 2s. 1½*d.*, and the normal exchange for £1 was 9.45 roubles. The State Bank issues notes for 1, 3, 5, 10, 25, 50, 100, 500, and 1,000 roubles.

(3) *Banking*

The banking system of Russia is somewhat complex. The most salient feature is the dominant position of the State Bank. Other notable characteristics are the close connection between the banks and State finance, and the tendency to far-reaching regulation of private banks by the State. For purposes of description the banks can be divided as follows: (1) the State Bank; (2) other State banking institutions; (3) joint-stock banks granting long-term loans on landed security; (4) commercial banks, mainly joint-stock concerns, but

also including municipal banks in certain towns, which grant short-term commercial credit; (5) credit associations of various kinds.

The State Bank is a Government institution, having the closest relations with the Treasury. It controls the currency, has a monopoly of the note issue, and undertakes general banking transactions and bill-broking. One of its most important functions is that of supporting smaller credit institutions by loans and advances on goods, especially grain, and the Government has made free use of its resources in the endeavour to finance the grain market and prevent premature and unprofitable sale of the harvest. For example, local agricultural, co-operative, and loan societies in the Don territory received advances of £71,000 in 1904, of £221,000 in 1908, and of £1,610,000 in 1912.

The difficulty of raising loans on landed security at a reasonable rate of interest subsequent to the liberation of the serfs and the assignment of the *nadyel* land, led the State to found two financial institutions, the nobles' land bank and the peasants' land bank, for the hypothecation of the property of these two classes respectively. Whereas the rate of private banks had often been as high as 10 per cent., that of the nobles' land bank varied from $3\frac{1}{2}$ to 5 per cent., and that of the peasants' land bank from 4 to 6 per cent. The total sum loaned on rural property in 1912 in all Russia was 3,318,000,000 roubles; of this 32 per cent. was loaned by the peasants' land bank, 25 per cent. by the nobles' land bank, and 43 per cent. by other credit institutions.

The State savings banks are separate concerns, but are dependent on central management and control, and work under the supervision of the State Bank. In 1910 some 7,365 offices had 6,940,000 open accounts, aggregating 1,282,000,000 roubles, the average deposit per account being 186 roubles. The funds were invested to the extent of 37 per cent. in State loans, 24 per cent. in railway securities, and 36 per cent. in the bonds of the nobles' and peasants' land banks. The figures for

many years back show increases of deposits of $7\frac{1}{2}$ –10 per cent. annually.

An important series of joint-stock banks was started in the early 'seventies under special ordinances. These banks usually cover one or at most two provinces in their operations, and are confined to those for which their charter is made out. Their function is loaning on landed security. Their bonds bear $4\frac{1}{2}$ per cent. interest, and are negotiable documents. Three such banks exist in the Don and Volga area, and their operations and capital are as follows:—

Bank.	Share capital.	Reserve.	Bonds circulation (1911).
	£	£	£
Nijni-Novgorod-Samara..	647,000	316,000	8,729,000
Yaroslav-Kostroma ..	250,000	71,000	3,166,000
Don	800,000	453,000	11,903,000

The joint-stock and commercial banks are of fairly modern creation. Besides carrying on general banking transactions, they grant short-term commercial credit, deal largely in commercial securities, and act as intermediaries in stock and share transactions. They also finance industrial undertakings, and even promote new enterprises of the kind. Although these banks in many cases have territorial titles, such as Azov-Don, Russo-Asiatic, &c., their activities are not confined to the regions indicated.

There are nine joint-stock banks doing business in Russia generally which have branches in towns of the Don and Volga region. Their names, with the number of branches in the area, are as follows:—

Azov-Don Commercial Bank, 9 branches.

Russian Bank for Foreign Trade, 5 branches.

Union Bank, 3 branches.

Moscow Bank, 3 branches.

Petrograd Discount Bank, 2 branches.

International Bank of Commerce of Petrograd, 2 branches.

Bank of Commerce and Industry, 8 branches.

Volga-Kama Bank, 11 branches.

Russo-Asiatic Bank, 8 branches.

These are all wealthy corporations with paid-up capital varying between two and six millions sterling.

The commercial community in several large towns has founded banking institutions of a joint-stock character for financing local trade. The list of these is as follows:—

Commercial Bank of Rostov-on-Don.

Rostov-on-Don Merchants' Bank.

Nijni-Novgorod-Samara Bank.

Samara Commercial Bank.

Tsaritsyn Merchants' Bank.

Voronezh Merchants' Bank.

There are further in certain towns municipal banks, which are of a local character and controlled by the municipal authorities. Arsamas, Astrakhan, Kazan, Nijni-Novgorod, Saratov, Sysran, Taganrog, Tsaritsyn, Voronezh, and Yaroslav have each a municipal bank.

One of the most vital necessities of the country is small local agrarian credit. The need is partially supplied by various kinds of mutual credit associations, which work under a special law, and are supported by the State Bank. The first of such associations was founded in 1862. From 1883-1893 the foundation of new ones was forbidden by law, but the embargo was removed at the end of that period, and between 1894 and 1908, 232 new associations were started. Progress since then has been very rapid. In 1911 co-operative credit institutions numbered 4,314, with a membership of 2,269,000 and a sum of 167,180,000 roubles on loan. Later figures show that in 1914 some 13,000 credit associations existed, with 8,000,000 members, resources of 630,000,000 roubles, and a sum of 520,000,000

roubles on loan. The principal purposes for which the loans were made were the renting of land and the purchase of live-stock and of seed.

Lack of centralization and co-ordination constitutes an element of weakness in the movement. A central bank for mutual credit associations existed in Petrograd, but by no means all mutual banks were associated with it. This rôle has recently been taken up by the Moscow People's (Narodny) Bank, which is the central bank for co-operative societies in Russia. The rapid accumulation of capital from small savers is plain from the figures relating to small credit institutions and the State savings banks. Deposits in 1908 were 2,969,000,000 roubles, and in 1913 almost double that sum, namely, 5,228,000,000 roubles.

(4) *Influence of Foreign Capital*

It is difficult to trace any influence of foreign capital in the Don and Volga region. The financing of agriculture is quite free from it, and its part in financing industry is described above (p. 92). State loans have been used for railway construction, but the foreign capital thus brought in exercises no influence. The great commercial banks are reputed to be much supported by German high finance, and their policy is said to be directed in the interests of German trade and banking, but no actual figures can be quoted in support of this statement. There is indeed not much to attract foreign capital to the Don and Volga region, as the absence of precious metals, petroleum, or any other natural product, the exploitation of which would bring a high return, leaves little except agriculture and industries dependent on it for the investor to take up, and these are in no way sufficiently attractive.

(5) *Principal Fields of Investment*

Any future field for investment would appear to lie in the financing of public utility works, such as har-

bours, canals and railways, tramways and lighting for towns, &c., all of which are needed in the larger centres, and will probably be undertaken with capital secured on the local revenues. The further development of the Don anthracite region will also offer opportunity for investment.

APPENDIX

TABLE I.—AVERAGE ACREAGE OF PRINCIPAL CROPS,
1901-10.

Government.	Rye.	Wheat.	Barley.	Millet.	Pulses.	Oats.	Pota- toes.	Flax and Hemp.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	<i>Acres.</i>	<i>Acres.</i>
Astrakhan ...	385,500	777,300	20,500	69,122	3,510	20,925	12,430	3,140
Don Cossack terri- tory	2,320,000	6,345,000	2,638,110	354,300	32,562	687,868	153,765	89,910
Kazan ...	2,673,600	119,700	113,832	—	176,310	1,518,800	499,500	75,200
Kostroma ...	1,100,300	52,922	180,590	—	19,090	704,951	115,225	117,663
Nijni-Novgorod ...	1,419,600	207,090	25,650	—	147,690	648,300	112,200	118,260
Samara ...	2,709,700	6,184,000	258,120	544,590	112,760	895,860	92,237	58,050
Saratov ...	2,779,000	2,452,000	88,943	658,430	150,773	1,092,000	108,877	67,300
Simbirsk ...	1,866,000	167,135	11,736	328,490	104,600	992,900	99,460	58,050
Vladimir ...	1,085,600	25,928	23,395	—	55,792	548,388	157,590	100,907
Voronezh ...	2,128,000	1,322,000	659,200	680,500	25,900	848,900	220,150	117,400
Yaroslav ...	598,200	17,517	28,200	—	12,093	416,400	126,100	111,000

TABLE II.—ACREAGE OF PRINCIPAL CROPS, 1914

Government.	Rye.	Wheat.	Barley.	Millet.	Pulses.	Oats.	Pota- toes.	Flax and Hemp.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	<i>Acres.</i>	<i>Acres.</i>
Astrakhan ...	522,771	978,963	33,353	73,807	3,547	22,356	13,805	1,436
Don Cossack terri- tory	1,956,000	7,803,000	3,565,000	337,700	22,461	761,321	194,000	50,373
Kazan ...	2,523,000	199,932	110,813	104,000	224,200	1,574,000	92,223	80,141
Kostroma ...	1,109,000	49,800	166,200	—	16,958	712,908	140,200	123,705
Nijni-Novgorod ...	1,390,000	193,117	25,074	59,583	151,823	616,800	144,360	118,227
Samara ...	2,267,500	7,343,235	428,511	489,299	86,154	847,800	109,200	46,100
Saratov ...	2,686,000	2,908,000	105,391	582,940	231,486	966,311	126,689	38,097
Simbirsk ...	1,805,400	311,909	10,605	324,300	113,700	884,264	156,255	47,500
Vladimir ...	1,068,800	29,070	24,556	—	43,400	568,100	187,500	106,936
Voronezh ...	2,251,000	1,664,000	634,624	621,486	32,197	935,271	255,236	76,256
Yaroslav ...	595,300	19,286	26,060	—	11,488	374,784	131,689	95,496

TABLE III.—AVERAGE HARVEST OF PRINCIPAL CROPS,
1901-1910.

Government.	Rye.	Wheat.	Barley.	Millet.	Pulses.	Oats.	Pota- toes.	Flax and Hemp.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	<i>Tons.</i>	<i>Tons.</i>
Astrakhan ...	28,000	92,000	2,000	6,000	400	2,900	2,000	250
Don Cossack terri- tory	330,000	1,290,000	754,400	54,000	5,800	144,000	190,000	10,000
Kazan ...	694,000	85,000	33,000	9,000	29,000	355,000	103,000	11,000
Kostroma ...	277,000	10,000	46,000	—	4,000	174,000	268,000	13,000
Nijni-Novgorod ...	390,000	54,000	6,000	15,000	28,000	150,000	260,000	17,000
Samara ...	555,000	1,169,000	43,000	67,000	18,000	159,000	159,000	9,000
Saratov ...	692,000	455,000	17,000	109,000	31,000	254,000	190,000	10,000
Simbirsk ...	560,000	75,000	3,000	63,000	18,000	231,000	203,000	11,000
Vladimir ...	232,000	6,000	6,900	—	13,000	163,000	368,000	13,000
Voronezh ...	636,000	290,000	133,000	169,000	7,000	249,000	520,000	23,000
Yaroslav ...	185,000	5,000	9,000	—	3,000	134,000	372,000	15,000

TABLE IV.—HARVEST OF PRINCIPAL CROPS, 1914.

Government.	Rye.	Wheat.	Barley.	Millet.	Pulses.	Oats.	Pota- toes.	Flax and Hemp
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	<i>Tons.</i>	<i>Tons.</i>
Astrakhan ...	55,000	158,000	6,000	8,000	500	4,000	26,000	250
Don Cossack terri- tory	374,000	1,578,000	931,000	43,000	4,000	188,000	319,000	9,000
Kazan ...	515,000	76,000	26,000	4,000	15,000	266,000	143,000	8,000
Kostroma ...	276,000	8,000	29,000	—	2,000	133,000	318,000	10,000
Nijni-Novgorod ...	407,000	38,000	4,000	8,000	10,000	88,000	309,000	13,000
Samara ...	467,000	1,784,000	101,000	47,000	12,000	183,000	226,000	7,000
Saratov ...	621,000	569,000	18,000	56,000	33,000	164,000	228,000	6,000
Simbirsk ...	498,000	70,000	2,000	22,000	9,000	166,000	249,000	7,000
Vladimir ...	283,000	7,000	4,000	—	5,000	109,000	454,000	17,000
Voronezh ...	777,000	372,000	127,000	126,000	8,000	274,000	622,000	18,000
Yaroslav ..	151,000	4,000	5,000	—	1,500	80,000	374,000	10,000

AUTHORITIES

POLITICAL AND SOCIAL

- BEAZLEY, R., N. FORBES, and C. A. BIRKETT. *Russia from the Varangians to the Bolsheviki*. Oxford, 1918.
- BYKADOROV, V. *History of the Don*. Petersburg, 1907 (in Russian).
- CZAPLICKA, M. A. *The Evolution of the Cossack Communities* (Journal of the Central Asian Society, London, May, 1918).
- FUKS, K. *The Kazan Tatars*. Kazan, 1844 (in Russian).
- KLUCHEVSKI, F. O. *A History of Russia*. Translated by C. J. Hogarth. 3 vols. London, 1911.
- LEVSHIN, A. *Historical and Statistical Account of the Ural Cossacks*. Petersburg, 1895 (in Russian).
- RAMBAUD, A. *Histoire de la Russie*. 5th ed. Paris, 1900.
- SEMEV, V. P., editor. *Rossiya*. Vol. 1, 1899; vol. 2, 1902; vol. 6, 1901; vol. 14, 1910. Petersburg (in Russian).
- SUKHORUKOV, V. *Historical Account of the Land of the Don Voiska*. Moscow, 1895 (in Russian).
- VELITSYN, A. A. *Germans in Russia*. Petersburg, 1893.

ECONOMIC

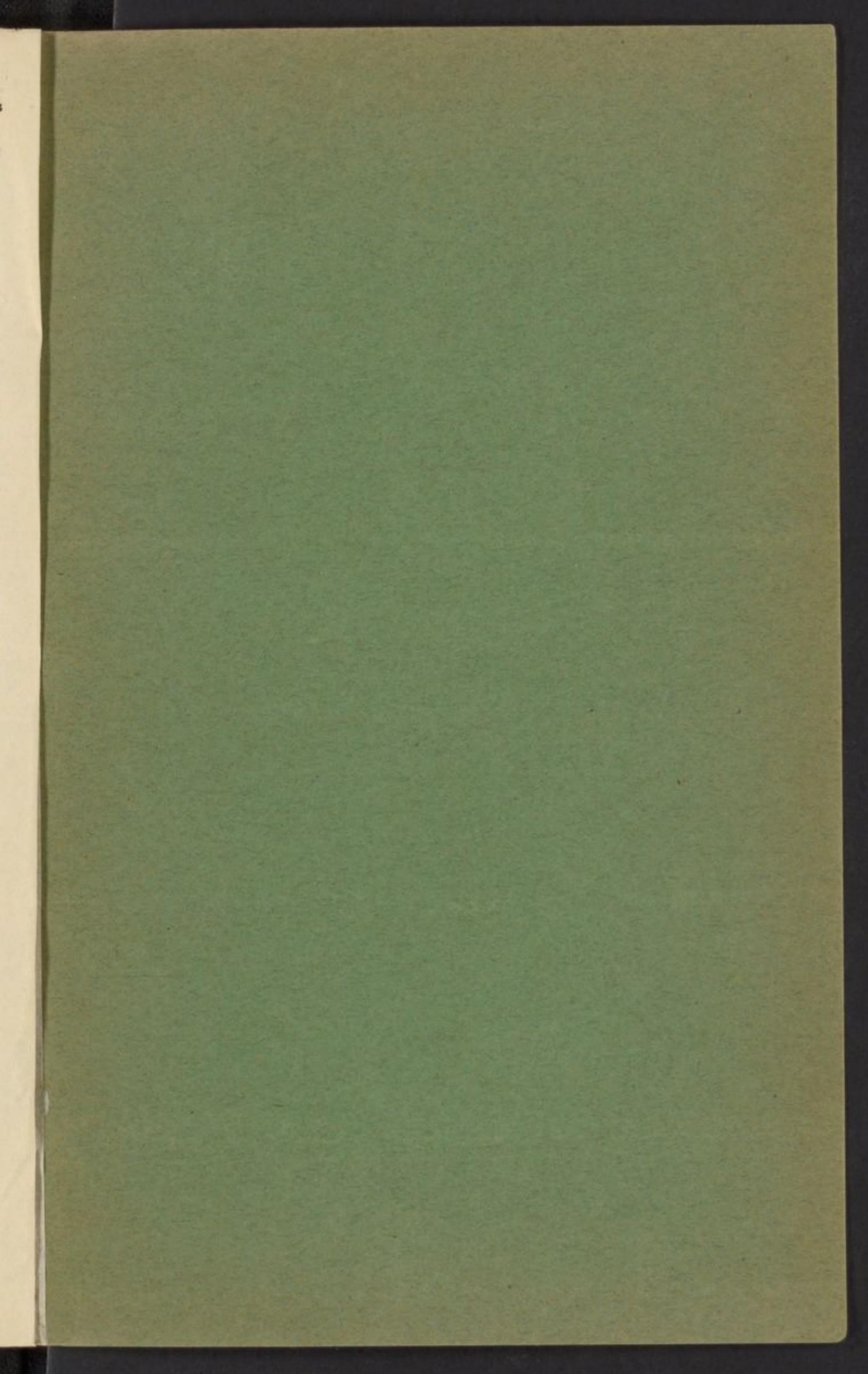
- Diplomatic and Consular Reports*, Consular District of Odessa. Nos. 4965, 5436, 5544. London, 1912, 1914, and 1915.
- Annual Collection of Agricultural Statistics* (Russian Department of Agriculture). Petrograd, 1916.
- Commercial Maps of the Russian Government* (Bureau of Trade and Industry). Petrograd.
- Statistical Annual of Council of Representatives of Commerce and Industry*. Petersburg, 1912.
- Agricultural Industry of Russia* (Russian Department of Agriculture). Petersburg, 1914.
- Russian Mining Journal* (*Gornie Journal*). Kharkov, 1915.
- Russian Year Book*. London, 1912 and 1916.
- Brockhaus-Efron. Russian Encyclopædia*. Petersburg, 1900.
- ANDREEVSKI, I. E., editor. *Don Cossack Territory*. Vol. XI, p. 29. Petersburg, 1893.

- ENGELBRECHT, Dr. Th. H. *Landwirtschaftlicher Atlas des russischen Reiches in Europa und Asien.* Berlin, 1916.
- LUCHITSKI, I. *Études sur la propriété communale dans la Petite Russie.* Paris, 1899.
- SEMENOV, V. P. See above.
- VOLKOV, N. T. *New Law relating to the system of Land Tenure.* Petrograd, 1914 (in Russian).
- YASNOPOLSKI, L. N., editor. *Statistical-Economic Sketches of the territories, governments, and towns of Russia.* Kiev, 1913 (in Russian).
- ZUCKERMANN, S. *Exchange of Goods between Russia and Germany.* Berlin, 1916.
- Industrial figures supplied by E. Cook, Esq., late Commercial Attaché of the British Embassy, Petrograd, and M. Atchkassov, Commercial Representative of the Russian Embassy, London.*

MAPS

The Don and Volga Basins are comprised in twelve sheets (Rostov, L. 37; Praskoveya, L. 38; Astrakhan, L. 39; Kharkov, M. 37; Saratov, M. 38; Uralsk, M. 39; Moskva, N. 37; Penza, N. 38; Kazan, N. 39; Yaroslav, O. 37; Nijni-Novgorod, O. 38; Viatka, O. 39) of the International Map (G.S.G.S. No. 2758), published by the War Office, on the scale of 1:1,000,000.

A special map of this country, on the scale of 1:3,220,177, and showing soils, &c., has been issued by Stanford's Geographical Establishment.



LONDON :

PRINTED AND PUBLISHED BY H.M. STATIONERY OFFICE.

To be purchased through any Bookseller or directly from
H.M. STATIONERY OFFICE at the following addresses :
IMPERIAL HOUSE, KINGSWAY, LONDON, W.C. 2, and
28, ABINGDON STREET, LONDON, W.C. 2, and
37, PETER STREET, MANCHESTER ;
1, ST. ANDREW'S CRESCENT, CARDIFF ;
23, FORTH STREET, EDINBURGH ;
or from E. PONSONBY, LTD., 116, GRAFTON STREET, DUBLIN.

1920.

Price 2s. Net.