

HANDBOOKS PREPARED UNDER THE DIRECTION OF THE  
HISTORICAL SECTION OF THE FOREIGN OFFICE.—No. 107

---

DT 547  
.G7  
Copy 1

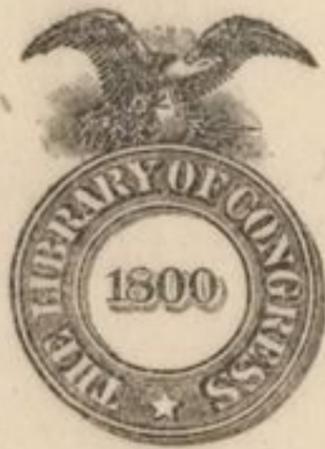
UPPER SENEGAL  
AND  
NIGER

LONDON:  
PUBLISHED BY H.M. STATIONERY OFFICE.

1920

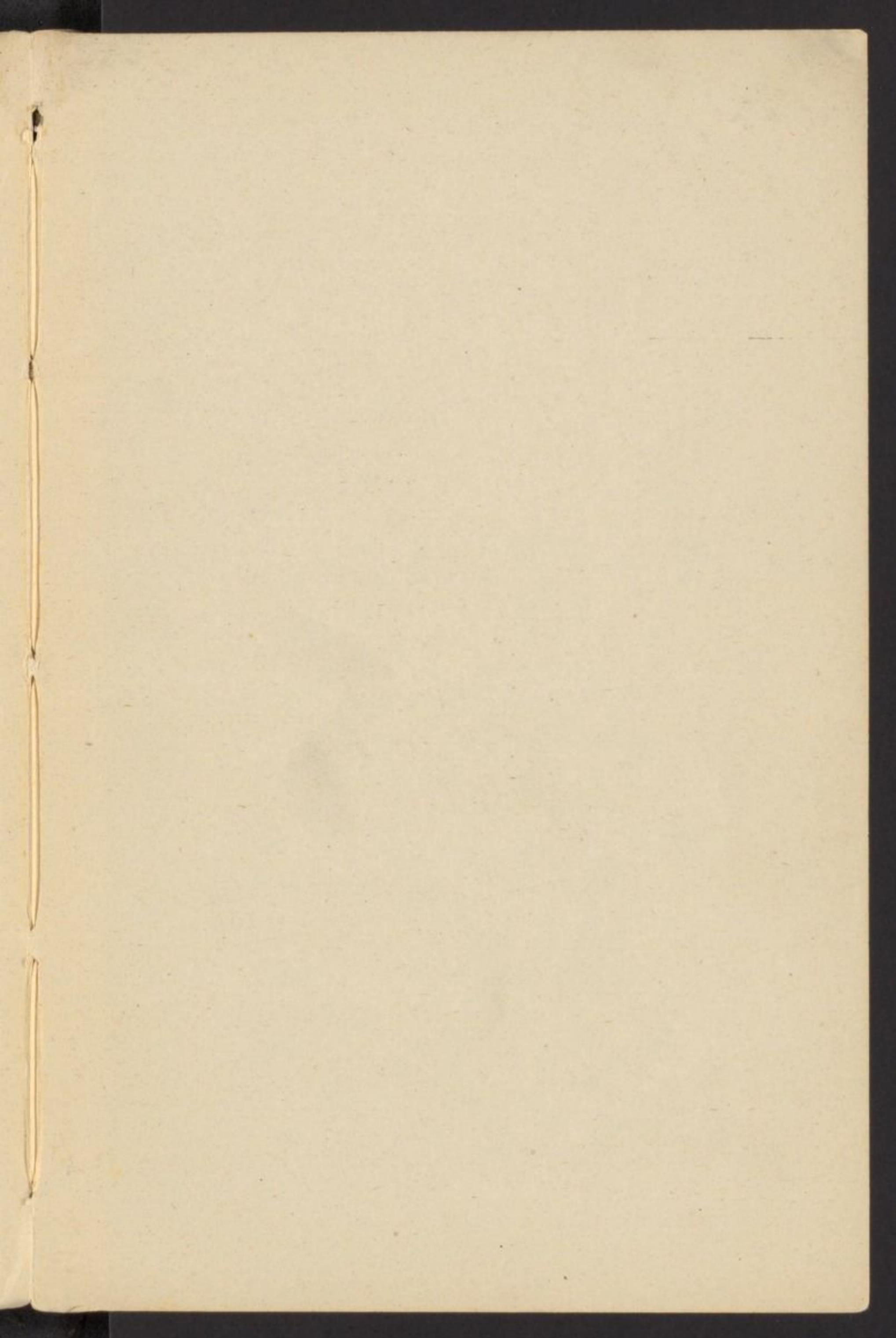


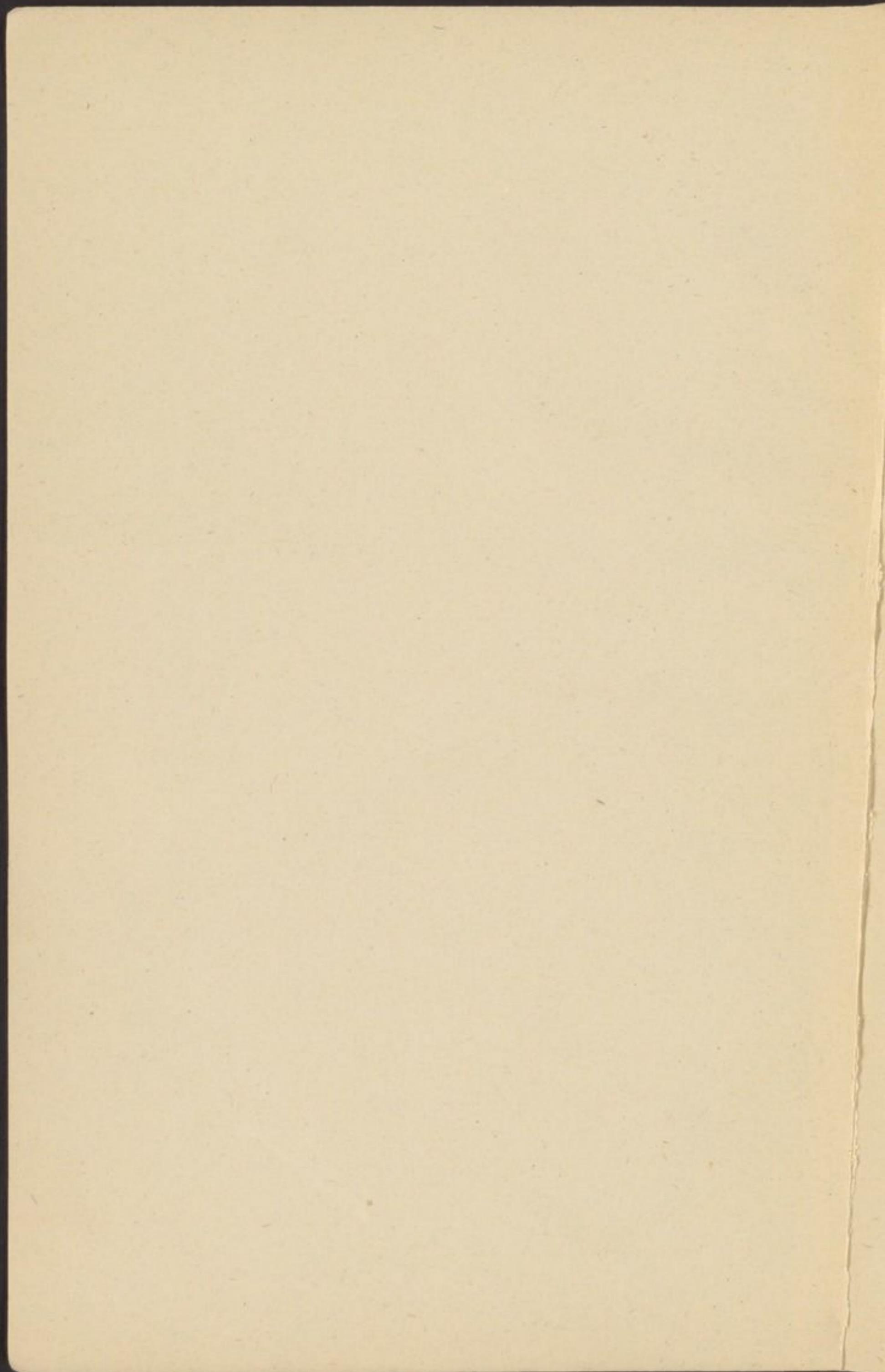
Micrograph

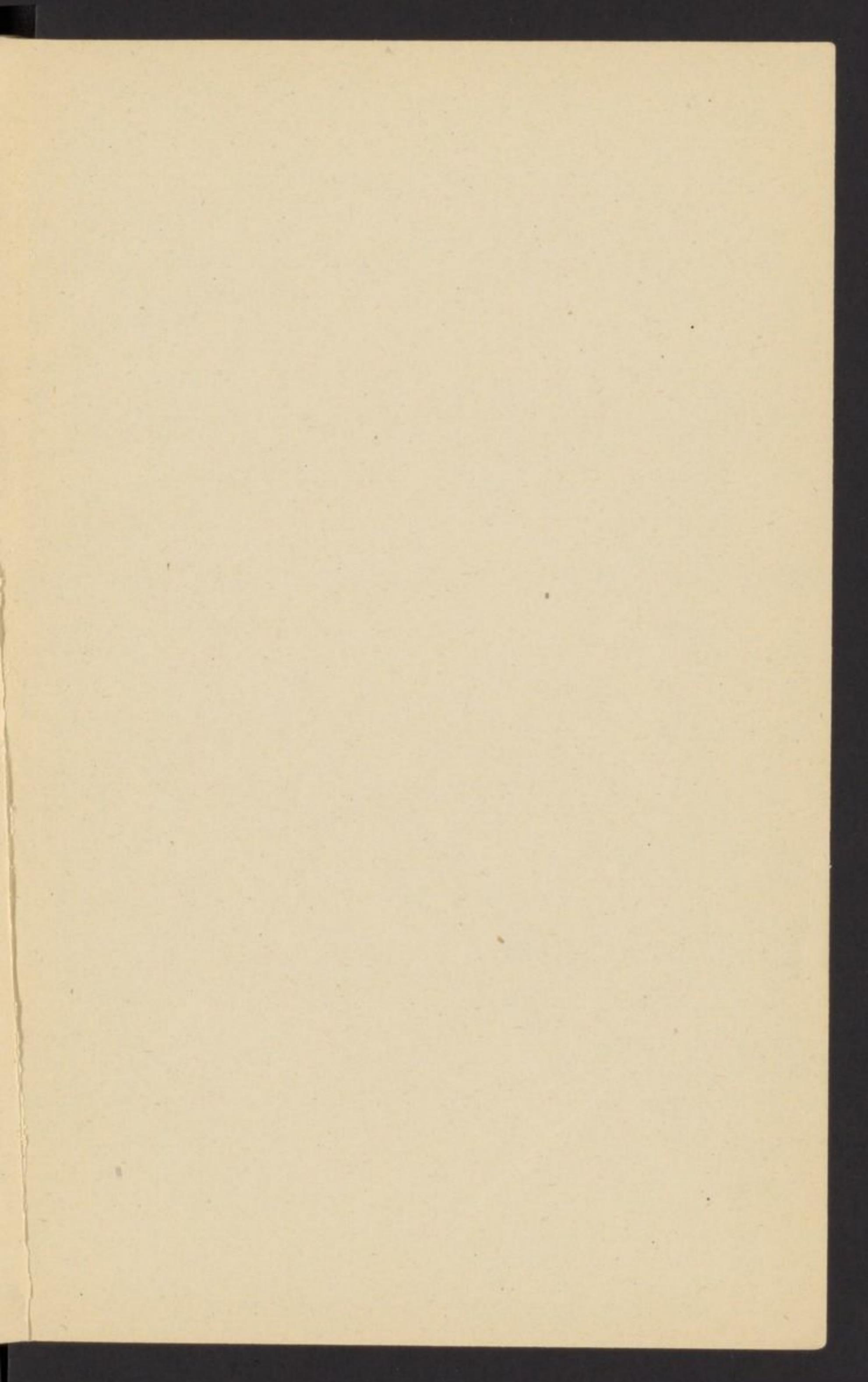


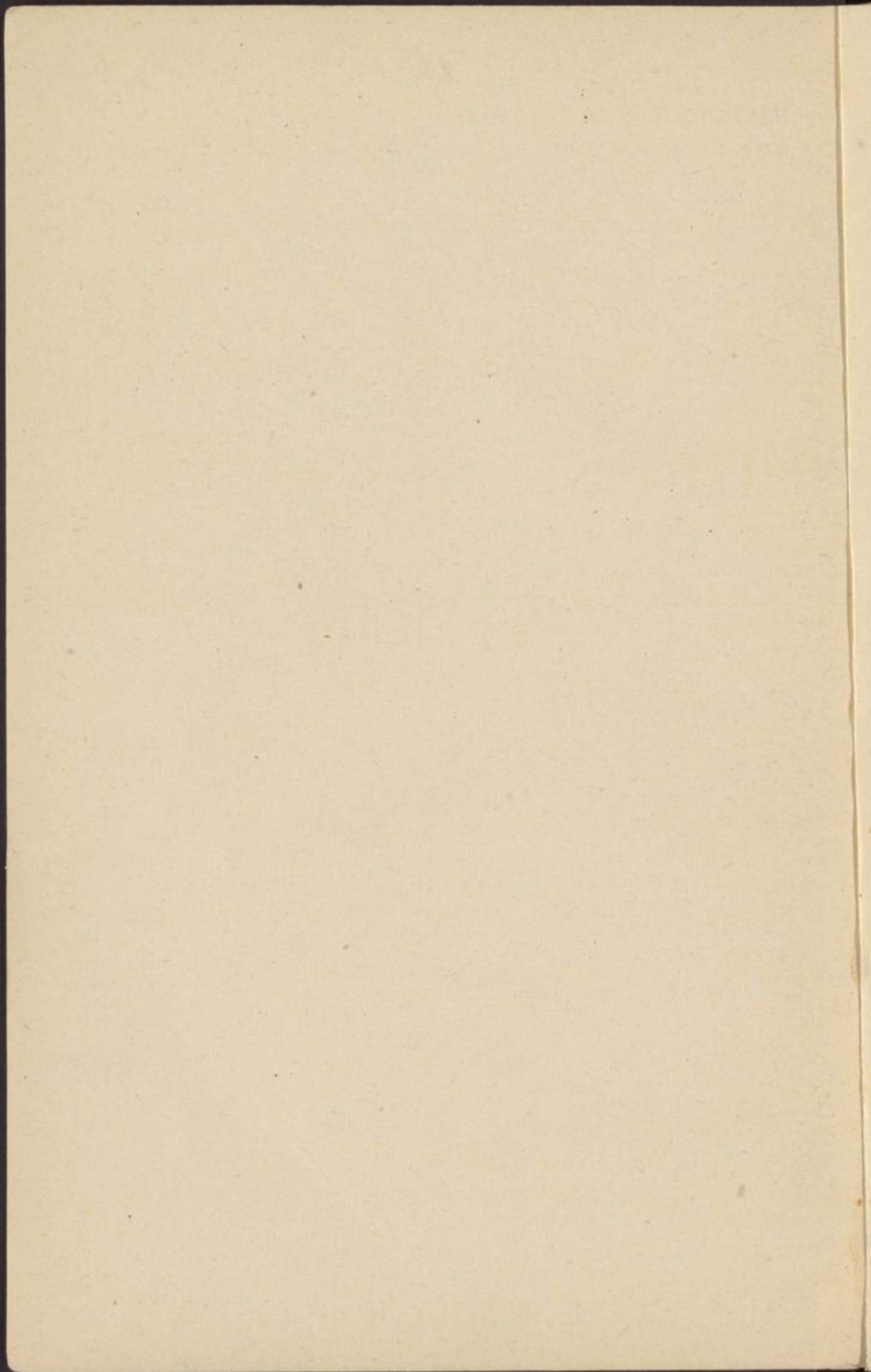
Class DT547

Book G7









88

HANDBOOKS PREPARED UNDER THE DIRECTION OF THE  
HISTORICAL SECTION OF THE <sup>Gt. Brit.</sup> FOREIGN OFFICE.—No. 107  
A

---

207  

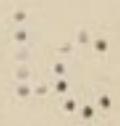
---

1407

# UPPER SENEGAL

AND

# NIGER



LONDON:  
PUBLISHED BY H.M. STATIONERY OFFICE.

---

1920

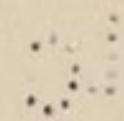
UNIVERSITY OF CHICAGO LIBRARY  
1100 EAST 58TH STREET  
CHICAGO, ILL. 60637

IT 547  
.G37

UPPER SENEGALE

NIGER

n. of D.  
OCT 22 1920



UNIVERSITY OF CHICAGO LIBRARY  
1100 EAST 58TH STREET  
CHICAGO, ILL. 60637

1920

20.10/28/20

### 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
<b>I. GEOGRAPHY PHYSICAL AND POLITICAL</b>	
(1) Position and Frontiers ... ..	1
(2) Surface and River System	
Surface ... ..	4
River System ... ..	5
(3) Climate ... ..	7
Temperature ... ..	8
Rainfall ... ..	8
(4) Sanitary Conditions ... ..	8
(5) Race and Language	
Hamite Races ... ..	9
Negro and Negroid Races ... ..	10
Language ... ..	12
(6) Population	
Distribution ... ..	13
Towns and Villages ... ..	13
Movement ... ..	13
<b>II. POLITICAL HISTORY</b>	
Chronological Summary ... ..	15
(1) Acquisition of Territory ... ..	15
Expeditions of Gallieni and Frey ... ..	16
Binger's Journey ... ..	16
Expeditions of Archinard, Joffre, and Woelfel ... ..	17
(2) France and the United Kingdom ... ..	17
Frontier Agreements ... ..	18
Further Expeditions ... ..	18
Boundary between French Sudan and Gold Coast ... ..	19
(3) Boundary with Togoland ... ..	19
<b>III. SOCIAL AND POLITICAL CONDITIONS</b>	
(1) Religious ... ..	20
(2) Political ... ..	20
(3) Military Organization ... ..	21
(4) Public Education ... ..	21

# TABLE OF CONTENTS

[No. 107

	PAGE
<b>IV. ECONOMIC CONDITIONS</b>	
<b>(A) MEANS OF COMMUNICATION</b>	
(a) Roads ... ..	22
(b) Rivers ... ..	23
(c) Railways ... ..	25
(d) Posts and Telegraphs ... ..	27
<b>(B) INDUSTRY</b>	
(1) Labour ... ..	27
(2) Agriculture	
(a) Products of Commercial Value ... ..	28
(i) Vegetable Products ... ..	28
Castor Bean, Cereals ... ..	28
Cotton ... ..	30
Fibres ... ..	31
Ground-nuts, Gum ... ..	32
Rubber, Sesame ... ..	33
Shea Butter, Vegetable Ivory ... ..	34
Other Products ... ..	35
(ii) Animal Products ... ..	35
Live-stock ... ..	35
(b) Methods of Cultivation ... ..	38
(c) Forestry ... ..	38
(d) Land Tenure ... ..	39
(3) Fisheries ... ..	39
(4) Minerals ... ..	39
(5) Manufactures ... ..	41
<b>(C) COMMERCE</b>	
(1) Domestic	
(a) Principal Branches of Trade ... ..	42
(b) Towns, Markets, Fairs ... ..	42
(c) Organizations to promote Trade and Commerce ... ..	43
(d) Foreign Interests ... ..	43
(2) Foreign	
(a) Exports and Imports	
Upper Senegal and Niger ... ..	43
Military Territory of the Niger ... ..	45
(b) Customs and Tariffs ... ..	46
<b>(D) FINANCE</b>	
(1) Public Finance ... ..	46
(2) Currency ... ..	48

	PAGE
APPENDIX	
EXTRACTS FROM TREATIES, &c.	
I. Declaration between the British and French Governments, August 5, 1890 ... ..	49
II. Convention between Great Britain and France, June 14, 1898 ... ..	49
III. Convention between Great Britain and France, April 8, 1904 ... ..	51
IV. Convention between France and Germany, July 23, 1897 ... ..	52
STATISTICS	
Table I.	
(a) Exports and Imports by the Senegal route, 1908-14 ... ..	53
(b) Total Exports from Upper Senegal and Niger, 1912 and 1913 ... ..	54
Table II.	
(a) Quantities, Values, and Destinations of Exports from Upper Senegal and Niger in 1913 by the Senegal route ... ..	54
(b) Quantities and Values of Exports from Upper Senegal and Niger in 1913 by the Guinea route ... ..	55
(c) Quantities and Values of Exports from Upper Senegal and Niger in 1913 by the Colonies of the South Coast ... ..	55
Table III.	
Value and Origin of Imports into Upper Senegal and Niger in 1913 by Senegal route only ... ..	56
Table IV.	
Quantities, Values, and Immediate Destinations of Exports from the Military Territory of the Niger, 1913 ... ..	57
Table V.	
Imports into the Military Territory of the Niger, 1913 ... ..	58
AUTHORITIES ... ..	59
MAPS ... ..	60

PREFACE

ix

I. Introduction, 1890-1900

II. The period 1900-1914

III. The period 1914-1918

IV. The period 1918-1929

V. The period 1929-1933

VI. The period 1933-1939

VII. The period 1939-1945

VIII. The period 1945-1950

IX. The period 1950-1955

X. The period 1955-1960

XI. The period 1960-1965

XII. The period 1965-1970

XIII. The period 1970-1975

XIV. The period 1975-1980

XV. The period 1980-1985

XVI. The period 1985-1990

XVII. The period 1990-1995

XVIII. The period 1995-2000

XIX. The period 2000-2005

XX. The period 2005-2010

XXI. The period 2010-2015

XXII. The period 2015-2020

XXIII. The period 2020-2025

XXIV. The period 2025-2030

XXV. The period 2030-2035

XXVI. The period 2035-2040

XXVII. The period 2040-2045

XXVIII. The period 2045-2050

## I. GEOGRAPHY PHYSICAL AND POLITICAL

### (1) POSITION AND FRONTIERS

THE colony of Upper Senegal and Niger,<sup>1</sup> with the Military Territory of the Niger, forms the north-eastern part of French West Africa. The boundaries of the colony have in some directions not been clearly delimited, but they may be said to be roughly between 12° west and 12° east longitude, and 9° 20' and 23° north latitude. The district has an area of about 802,000 square miles (Upper Senegal and Niger, 300,000 square miles; Military Territory, 502,000 square miles).

Upper Senegal and Niger, including the Military Territory, includes more than two-thirds of the course of the Niger, the country enclosed in the Great Bend, and a Saharan region north of Timbuktu. The Military Territory of the Niger includes the Adghagh, Air and Damergu districts, with the desert between the Niger on the west and the regions of Tibesti and Chad on the east.

Considerable use has been made of natural features in determining the boundaries, but these often follow the frontiers of old native states and do not correspond with ethnic or linguistic divisions. The lines separating French from English and German possessions, and dividing the Algerian from the West African Sahara, are almost wholly artificial.

Upper Senegal and Niger and the Military Territory are bordered on the north by the Algerian Sahara. The frontier, which has not been delimited, starts from the neighbourhood of the Bir el-Ksio

<sup>1</sup> The colony of Upper Senegal and Niger was divided by official decree early in 1920, when the new colony of Upper Volta was formed, extending from the N.W. frontier of Dahomey in the E. to the N.E. frontier of the Ivory Coast in the W., its northernmost limit being in about 16° N.

( $23^{\circ} 3' N.$ ,  $7^{\circ} W.$ ) and runs east-south-east to that of In Uzel and Tin Zawaten (about  $20^{\circ} N.$ ,  $3^{\circ} E.$ ), and then north-east to the Libyan frontier on the Azjer hills south of Ghat.

The western boundary of the colony, largely undefined, starts from the vicinity of Bir el-Ksio, runs in a south-westerly direction through uninhabited desert, separating Upper Senegal and Niger from Mauretania, till, somewhat south of the 16th parallel, it strikes the course of the Karakor or Tarkagut, which it follows from Fete Diulle as far as its confluence with the Senegal near Kabu, a little below Ambidedi. From this point the Faleme river, from its confluence with the Senegal to above Satadugu, forms the boundary between Upper Senegal and Niger and the neighbouring colony of Senegal.

The southern boundary begins at this point and is formed first by the frontier of French Guinea. It proceeds eastward on an irregular course in the neighbourhood of the 12th parallel, crossing the Bafing (the western branch of the Upper Senegal) near Tamba, and the Bakhoy (the eastern branch of the same) about the level of Niagassola, and striking the Niger 31 miles below Sigiri. Thence the boundary passes south-east, following the course of the Sankarani for 38 miles on the way, to a point 10 miles north-west of Maninian, where the boundaries of French Guinea, the Ivory Coast, and Upper Senegal and Niger meet (in about  $10^{\circ} 5' N.$ ,  $7^{\circ} 44' W.$ ).

From this spot the boundary separating Upper Senegal and Niger from the Ivory Coast runs a very irregular eastern course about the 10th parallel, following on its way for 10 miles the course of a second Bafing, for 25 that of the Bagoë, and for 60 that of the Leraba, and finally striking the Gold Coast frontier and the Black Volta in about  $9^{\circ} 30'$  north latitude.

The next section of the boundary, that lying between Upper Senegal and Niger and the Northern Territories of the Gold Coast, ascends the Black Volta to about  $11^{\circ}$  north latitude and then runs approximately due

east to the neighbourhood of the White Volta, after which it strikes somewhat north-east to the frontier of Togoland. The boundary between Upper Senegal and Niger and Togoland runs east-south-east for 78 miles, reaching the parallel  $11^{\circ}$  near Pungu, and following it to about  $0^{\circ} 56'$  east longitude. Near this point the north frontier of Dahomey begins, and the boundary runs approximately east to the Atakora massif, which it then follows north-east to the Mekru. Reaching this at  $11^{\circ} 30'$  north latitude, it descends the river as far as its confluence with the Niger and the Niger itself to the frontier of Nigeria.

The section of the boundary separating the Military Territory from Nigeria leaves the Niger at Dole, crosses the 12th parallel at about  $3^{\circ} 40'$  east longitude, runs north to about latitude  $12^{\circ} 35'$ , leaving Junju to the west, and then trends north-north-east and north, passing east of Beibei and Nassarawa to  $13^{\circ} 30'$  north latitude. Thence the boundary goes east-north-east to a point south of Bassasaga, and crosses the 5th meridian at  $13^{\circ} 45'$  north latitude. The frontier now runs east, passing about 3 miles south of Birni Nkonni, and north of Sabon Birni, and then south-east to the 13th parallel, which is reached at  $7^{\circ}$  east longitude. Curving north, and leaving Katsena and Daura in British territory, it then strikes south, crossing the 9th meridian east at  $12^{\circ} 45'$  north latitude, runs east for about 40 miles, and then trends east-north-east to a point 3 miles south of Zumba. From Zumba it drops south-east to the Komadugu Yobe (Waube) river, which forms the Anglo-French boundary from Dushi to its mouth in Lake Chad.

The eastern boundary of Upper Senegal and Niger, which separates the colony from that of French Equatorial Africa, appears to be quite undefined, but follows in general a northerly line from Lake Chad across the desert of Sahara as far as the very vague frontiers of Tripoli.

Between Upper Senegal and Niger and the Military Territory of the Niger, the administrative boundary

runs from the point at which the Mekru river becomes the northern boundary of Dahomey in an irregular north-westerly direction to the Niger, which it crosses 50 miles south-west of Timbuktu, thereafter losing itself in the Sahara.

## (2) SURFACE AND RIVER SYSTEM

### *Surface*

The surface consists generally of a series of plains with a gentle upward slope from north and west to south and east, separated by low groups of hills, and forms a transitional belt between the Sahara and the forest region surrounding the Gulf of Guinea. These plains are traversed by the great river valleys of the Niger with its tributaries and the upper waters of the Senegal, which form important natural lines of communication and are the chief areas of settlement and cultivation. The principal mountain systems are in the south.

The chief mountain district commences in the colony of Senegal in the Futa Jalon massif, and this system is continued into Upper Senegal and Niger by the steep range of the Tamba-Ura, which closes the rocky valley of the Faleme to the east and connects with a system of lower heights which extend north to Segou and enclose the upper valleys of the Bakhoy, Baule and Niger. Another spur of the eastern Futa Jalon separates the upper Niger valley from the Bani; while a third, the so-called Volta Plateau, forms an interior curve within the Niger Bend, following the chief arm of the Volta, attains its greatest height (about 3,000 ft.) between Duenza and Hombori, and trends south-east to the Dahomey frontier in a series of decreasing ridges.

With these exceptions, the surface of Upper Senegal and Niger is a granite and sandstone plateau, with little surface relief. The wide alluvial valley of the Niger traverses it from west to east in a great arc, the

celebrated Niger Bend, and in the lacustrine region between Mopti and Timbuktu this valley becomes a wide marshy plain of great fertility.

The surface of the Military Territory is largely desert, sparsely populated by Tuareg nomads. North and north-east of the Niger, the Adghagh and Air highlands form two compact massifs which, though surrounded by the rainless Sahara, yet come within the zone of light but regular rains.

The Adghagh is a tableland about 130 miles wide and 2,000-2,500 ft. high. The *wadis* which traverse it are the only habitable parts.

The Air, midway between Tibesti and the Niger Bend, is an isolated massif 6,000 square miles in area, broken by narrow ravines, and crossed from north to south by a line of volcanic crests. Agadez, the chief town of the Sahara and once a rich centre of trade, lies on its southern slope. Though the valleys are moderately fertile, the region is hardly suited to a sedentary population.

The third populated region of the Military Territory, Damergu and Demagherim, lies south of Air on the northern frontier of Nigeria. It is a rolling country of low hills and often marshy valleys, transitional between Sahara and Sudan. Much of the land in the south is fertile, producing immense crops of millet. The region is clothed with permanent pasture, but depends for its water supply on wells of great depth. Zinder, the capital of the Military Territory, in the south of Damergu, lies in a sandy region dotted with granite hills and boulders. The surrounding soil, though poor, is highly cultivated, and there is good pasture to the south.

### *River System*

The chief rivers of Upper Senegal and Niger are the Niger itself, which runs for the greater part of its course through the country, and the upper waters of the Black and of the White Volta, the former of which

forms part of the boundary between Upper Senegal and Niger and the Gold Coast Colony.

The *Niger* traverses the colony in the great arc of the Niger Bend, running north-east to Timbuktu, and thence downwards to the Nigerian frontier. Entering the colony at Banko on the frontiers of French Guinea, the great river runs, sometimes through rapids, to Kulikoro, where it becomes a stream about a mile wide, with banks 20-25 feet high. At Mopti it receives its chief affluent, the Bani, which has a course of 380 miles, draining the regions of Buguni and Sikasso. With its volume almost doubled, the Niger now enters, at Lake Debo, the lacustrine region which extends from Mopti to Timbuktu. This is a vast depression about 60 miles wide covered by a network of lakes, channels, and *marigots*, the whole of which is inundated during the floods. The principal lakes are those of Debo, Korienze, and Fati. North of the river, between Timbuktu and Ras el-Ma, are the Saharan lakes, of which the chief is Fagibini, nearly 70 miles long by 12 broad. From Timbuktu to Ansongo the Niger flows between sandy banks, interrupted at Tosaye by a rocky gorge about 500 feet wide. From Ansongo to Niame the river is a labyrinth of rocks and islands, and is broken by numerous rapids. The current is swift, although the river, with an average width of 700 yards, flows in places through malarial swamps. From Say, a navigable reach of 300 miles extends over the borders of Nigeria as far as Bussa.

The Niger floods depend upon the rainfall in the upper courses of the Niger and the Bani. They begin to be felt in the upper reaches in June, as the result of the first rains, and reach their maximum at various places lower down the river at correspondingly later times, the highest flood point in the Ansongo-Niame stretch not being reached till the following February. The maximum rise recorded at Kulikoro is 21 feet; the average, 17 feet. When the floods are at their height the whole interior delta and the low

plains forming the *cercle* of Jenne are completely submerged, and the waters spread over an area of about 90 miles in width. The waters begin to retreat between Mopti and Timbuktu in February and March, and by May at Sansanding there is often less than one foot of water.

The navigable reaches of the Middle Niger extend from Kulikoro to Ansongo, a distance of 870 miles. There is a regular service of French Government steamers, launches, and steel barges, of which particulars are given below, p. 24. There is also considerable native traffic at all times of the year.

The upper waters of the *Black Volta*, or *West Volta*—the longer of the two streams which together form the Volta river of the Gold Coast—flow for some distance through Upper Senegal and Niger. It has a course parallel to that of the Mid-Niger, forming a small interior bend which runs north-east to Kury and then east and south-east to the Gold Coast frontier. The Black Volta has a strong current and numerous rapids, but is navigable from June to March inclusive by flat canoes of 2 to 5 tons burthen for about 215 miles below Kury.

### (3) CLIMATE

The climate is transitional between the Saharan and equatorial types. There are two seasons, the dry and the rainy. Humidity is least and variation of temperature greatest in the vicinity of the desert, while the heaviest and longest rains are experienced in the South Sudan. The dry season begins in November or December, and ends about May or June, and at this time a hard north-east wind is usual in the Niger district. Spells of east wind, most common in March or April, but also occurring in the Niger valley between October and December, coincide with intense dry heat. The rainy season begins in the Niger valley in May. The rains attain their full force in August and September, but continue into November in the Sudan.

*Temperature.*—The January means are 72° F. (22° C.) at Timbuktu, and 74° F. (23·5° C.) at Wagadugu. The nights are fresh and may not exceed 50° or 55° F. (10° to 13° C.). In the Niger region thick fogs, due to the evaporation of flood water, are common in December and January. The thermometer begins to rise in January, and from March to May is a period of intense heat, though slight rains begin in March and April in the Niger and Volta valleys. Mean April and May temperatures of 95° F. (35° C.) at Timbuktu and 88° F. (31° C.) at Wagadugu are experienced. June is a transitional month, usually marked in the Sudan by heavy thunderstorms. The stifling heats of the rains attain their maximum in October at Wagadugu with a mean of 81° (27·5° C.).

*Rainfall.*—The rains decrease in amount from south to north and from west to east. In the South Sudan they last until November, but in Timbuktu, Adghagh, and Air are reduced to a few scanty storms. In Upper Senegal, July and August are the rainiest months, though only 8·27 inches (210 mm.) fall at Timbuktu. South of the 14th parallel N., the amount is greatly increased, and 32·12 inches (816 mm.) fall at Wagadugu. Further east the Saharan regime is approached, and the rains greatly diminish.

#### (4) SANITARY CONDITIONS

No part of the colony is really suited to permanent European occupation, but the conditions can be tolerated if reasonable precautions are taken and no arduous labour is attempted. In the west and south the enervating heat of the rains, and in the Military Territory the high spring temperatures, are very trying to settlers. Health conditions seem to be better in Upper Senegal and Niger than in the neighbouring colony of Senegal, and are commonly best where the dry Saharan climate is felt and the north wind experienced. Europeans frequently suffer from dysentery, due to bad water, bilious fever, and rheumatism, but malaria

claims far fewer victims than in Senegal, and in the drier air of the Military Territory is said to be almost unknown.

In Upper Senegal and Niger sleeping sickness, which is such a scourge to the natives in the neighbouring colony, is confined to the valleys of the Volta, and is said to be unknown in the Military Territory. Small-pox, also prevalent among the natives, is giving way before vaccination. Leprosy, especially near the Niger, elephantiasis, guinea-worm, and other tropical diseases exist, but are seldom contracted by Europeans.

#### (5) RACE AND LANGUAGE

The population of this vast region consists:—

(a) Of pure or nearly pure Hamites. These are all immigrants from the north, and are mostly found in the Sahara and Sahel. They are generally pastoral peoples of more or less nomadic habit, and comprise three main groups: Tuaregs, Moors, and Peuls.

(b) Of innumerable negroid races. Pure negroes are only found on the coast and in the extreme north. These black races are sedentary village dwellers, chiefly agriculturists, and great difference of opinion exists as to their classification.

#### *Hamite Races*

*Tuaregs.*—The Tuaregs are Berber nomads found throughout the Sahara, from Algeria to Timbuktu and Zinder. They inhabit the Adghagh, the North Niger Bend as far south as 15° north, the Air, and Damergu. Much of their racial purity has been lost through marriage with other peoples. Tamahek is spoken by the Tuaregs of the desert, Fula by those of the Bend, and Hausa by those in Air. Their numbers cannot be accurately estimated, but certainly exceed 100,000.

*Moors.*—The Moors, chiefly of mixed Berber and Arab stock, are pastoral nomads and camel herdsmen, ranging the Azawad and Hodh, and extending into

Mauretania and Rio de Oro, where they form the bulk of the population. The principal tribes connected with this region, each with numerous divisions, are the Kuntas of the Azawad, the Berabishs of the Azawad, and the Beni Hassen of the Hodh. All speak Arabic.

The Moorish tribes appear to number about 16,000 in Senegal, and over 100,000 in Upper Senegal and Niger; but their constant movements make even an approximate estimate impossible.

*Peuls.*—The origin of the Peuls is a subject of controversy, but they are probably of Libyan or Semitic stock, though now to some extent crossed with negroid blood. After various migrations, the Peuls appear to have established themselves in the Futa Jalon, where they became dominant. They spread thence through West Africa, being found in scattered groups throughout Senegal, the Sudan, Gambia, and French Guinea. Their approximate numbers are 120,000 in Senegal and 586,000 in Upper Senegal and Niger.

The Peul, or Fula, language has affinities with the negro tongues.

### *Negro and Negroid Races*

Only a few of these can be described.

*Tukulers.*—The Tukulers are the dominant black race of East Senegal, forming compact groups in the Faleme basin, Kaarta, Futa Toro, and the region between Kayes and Timbuktu. They have two branches: the warlike Torodos, described as violent, suspicious, and arrogant, and the Futankers, a pastoral and agricultural people of more docile disposition. The Torodos enlist in large numbers in the French Senegalese troops.

The Tukulers speak the Peul language in its purity and are regarded by some philologists as its originators. In Senegal alone they number about 131,000.

*Mandes.*—The Mandes, sometimes called, from their most important group, the Mandingos, are a great

family of negroid peoples, related by their dialects, and forming nearly half the black population of Upper Senegal and Niger. They also extend into Senegal, Gambia, and French Guinea. Considerable uncertainty appears to exist as to their classification; but the best authorities distinguish three main groups: those of the north, the centre, and the south. Their total numbers exceed  $1\frac{1}{2}$  millions.

In the north the most important divisions are the Sarakoles, Diulas, and Bozos.

The Mandes of the centre comprise the important groups of Mandingos, Bambaras, and Fulankes, with the Khassonkes and Kagoros.

The Mandingos, or Malinkas, are compactly grouped between the Faleme and Niger south of the railway, and are probably the present representatives of the original Mande stock. Their language, Mandingo, is spoken by over a million persons, and they have important colonies in South Ferlo and Kasamanse. The Mandingos, who are a fine and well-made people, appear to number about 175,000.

The Bambaras, or Banmanas, are now the most numerous of the Mande races, forming nearly half their total number. They are the most vigorous and intelligent of the Sudan peoples, and were preferred to all others as slaves by the Tukulers. Their chief centres of distribution are Kaarta and the Niger Valley south of the lakes, but they also have colonies in the Sahel, and in the Niger Bend east of the Bani. Their numbers are about 560,000.

The Fulankes extend from Bafulabe to Sikasso. They are chiefly Moslems, and number about 106,000.

The Mandes of the south have as their principal divisions the Samos, the Samorhos, the Dialonkes, the Sias or Bobo Diulas, and the Senufos, sometimes classed as a distinct family. The Samos (75,200) inhabit the Niger Bend north of Kury; the Samorhos (23,700) the region between Sikasso and Bobo-Diulasso; the Dialonkes (9,800) the country south of Kita and Satadugu; the Sias (6,000) the Bobo Diulasso district; the Senufos

(343,400) the district between Kutiala, Bobo Diulasso, and Sikasso.

*The Songhays.*—The Songhays are a great historic people, and were once the rulers over a vast negro empire which included the whole Sahara. They are now found chiefly in the Niger valley between Mopti and Bamba, and form part of the population of Timbuktu, where their language is spoken. Another branch, the Jermas, inhabits the East Niger between Burem and Naime. A colony of Songhays is also established at Agadez, where their language is current. Their numbers in Upper Senegal and Niger exceed 101,000, but those in the Military Territory are not computed.

*Volta Peoples.*—These are the remains of the aboriginal Sudan population, now scattered in the Niger Bend and South Sudan, and forming about half the inhabitants of Upper Senegal and Niger. They are almost entirely uncivilized, and are divided into numerous distinct though linguistically related groups. Of these the most important are the Habbes or Tombos, the Mossis, the Gurunsis, and the Lobis. All are warlike and primitive peoples, more or less hostile to strangers. The Volta races probably number over 2 millions.

A short account of the tribes peculiar to Senegal will be found in *Senegal*, No. 102 of this series.

### *Language*

Each ethnic group has its own language. Arabic is spoken by the Moors, Tamahek by most of the Tuaregs, Fula or Peul by the Peuls. Among the negroid population 30 tongues and 31 dialects are current in Upper Senegal and Niger alone, the most important being those of the Mande group (Mandingo) and Volta group (Mossi). Certain languages, however, have achieved a marked dominance. Thus Wolof has become the commercial dialect of Senegal, Mandingo of the West Niger Bend, Hausa of the East Niger Bend and Damergu, the line of separation being in the neigh-

bourhood of Wagadugu. Fula, spoken by the Peuls and Tukulers, has also spread to other races of the West Sudan, and is used by many Tuaregs of the Bend.

## (6) POPULATION

### *Distribution*

The region as a whole is sparsely populated, having under 8 inhabitants to the square mile (Upper Senegal and Niger nearly 17, Military Territory just over 2). This is partly the result of the unequal water supply, which in the north and centre concentrates the population in the river valleys. The Sudan south of 12° north latitude, however, has a high proportion of fertile land with ample water supply, and hence the density of the population increases from north to south, rising in Mossi to 38 per square mile.

### *Towns and Villages*

The majority of the inhabitants, with the exception of the Moors and Tuaregs, are village dwellers, and there are very few large towns. The only considerable town is Wagadugu, the capital of the Mossi country (population 19,317). In the Niger region, Segou has 8,360 inhabitants, Bamako 7,189, Jenne 6,536, and Timbuktu 6,334. The population of Zinder, the largest town of the Military Territory, is said to be about 6,000, while Agadez, the ancient capital of Aïr, said to have had at its zenith 50,000 inhabitants, now contains barely 1,000.

All these are native towns, the French settlements being confined to the coast of the neighbouring colony of Senegal.

### *Movement*

No complete figures of the native birth- and death-rates are available; and the impossibility of obtaining an accurate census of uncivilised populations makes any computation of probable increase or decrease of

small value. Such figures as we possess suggest that the general native population is rising, as we might expect it to do under the improved conditions resulting from French control, while the town populations have increased considerably. In 1911 the total population of Upper Senegal and Niger was 5,096,340, of whom 1,100 were Europeans, as against 4,470,991 in 1908, of whom 800 were Europeans; and of the Military Territory, 1,074,121 in 1911, of whom 300 were Europeans, as against a total of 850,000 in 1908. The population of Upper Senegal and Niger is believed to have increased to 5,645,355 by 1916.

## II. POLITICAL HISTORY

### CHRONOLOGICAL SUMMARY.

- 1880 Beginning of French advance to Middle Niger.  
1881 Treaty with Ahmadu; protectorate over Futa Jalon.  
1883 Establishment of post of Bamako on the Niger.  
1886-87 Treaties with Samori and Ahmadu.  
1888 Final acquisition of Futa Jalon: Binger's expedition to territories within the Niger Bend (1888-89).  
1889 Further treaty with Samori: partial settlement of Gold Coast boundary (August 10).  
1891 Final overthrow of Ahmadu: occupation of Samori's capital.  
1892 Settlement of boundary with Liberia.  
1894 Occupation of Timbuktu.  
1894-95 Ineffective campaign against Samori from Ivory Coast.  
1897 Rivalry with Great Britain. Occupation of Bussa and Nikki. Advance to Nile. Settlement of boundary with Togoland.  
1898 Settlement with Great Britain of Lower Niger boundary (June 14, 1898): final overthrow of Samori.  
1899 Settlement with Great Britain in regard to Nile valley (March 21, 1899).  
1900 Lake Chad and Shari districts secured by defeat and death of Rabah (April 22).  
1901 Fadl'-Allah killed at Gujba, in Nigeria. Advance to Dikoa, in Cameroon.  
1904 Boundary with Nigeria adjusted in favour of France. Reorganization of colony of Upper Senegal and Niger as part of Government-General of West Africa.  
1906 Further definition of Niger boundary.  
1912 Adjustment of boundary with Togoland (September 28).

### (1) ACQUISITION OF TERRITORY

THE impetus given by the victories<sup>1</sup> of General Faidherbe to the extension of French control on the Upper Senegal and the Middle Niger was for the time being counteracted by the disasters of the Franco-German war, and it was not until 1880 that the French again resumed activity in the direction of the Niger. At that

<sup>1</sup> See *Senegal*, No. 102 of this series, pp. 9, 10.

time the chief political power between the Upper Senegal and the Middle Niger was the kingdom of Ahmadu, son of El Haj Omar, Faidherbe's opponent, who ruled from Segou to Kaarta, and represented the old Fula Empire. On the Middle Niger a raider chief named Samori had made himself master of a kingdom founded on the Mandingo tribes of Mohammedanised negroes. In 1880 Captain Gallieni surveyed a route for a railway from the navigable Senegal to the Niger, which he reached at Bamako. During the hostilities with Ahmadu which followed Kita was taken, and on March 21, 1881, Ahmadu signed a treaty, which was held by France to establish her protectorate of the left bank of the Niger. By 1883 Bamako had been definitely founded as a French post, and Samori's attacks were beaten off. In 1885-86 Colonel Frey again defeated him, and compelled him to sign a boundary treaty<sup>1</sup> (March 28, 1886), but was immediately confronted with a Mohammedan rising in the occupied territory; this he suppressed.

Gallieni returned in 1887, and on March 23 he compelled Samori to surrender the left bank of the Tinkisso, and the left bank of the Niger from the junction of the Tinkisso down to Bamako. On May 12 Ahmadu accepted complete French protection; but an attempt by Caron to occupy Timbuktu proved unsuccessful. A treaty of March 30, 1888, finally secured Futa Jalon (which had been first brought under protection in 1881). In the same year Captain Binger started from Bamako to explore the unknown tract of country lying within the great northern bend of the Niger. After securing treaties which brought under French protection the countries of Tieba, Kong, Jimini, Anno, and Bonduku, he made his way down the Camoe (Komoe) river to the French settlement of Grand Bassam on the Ivory Coast.

<sup>1</sup> According to C. 6701, p. 3, Samori then accepted a protectorate, but the treaty of March 23, 1887 (*ibid.*, pp. 22, 23), appears to be the first real acceptance of this relationship.

The natural result of Captain Binger's journey was to open up the hinterland of this district, and to secure the continuity of French territory on the coast and on the Upper Niger, at the expense of Sierra Leone and Liberia. On February 21, 1889,<sup>1</sup> Samori was compelled to agree that the Jeliba (Niger) should form the boundary of his possessions. In 1890, however, Ahmadu made a bid for independence; but in the following year Colonel Archinard, operating against him, captured Segou on the right bank of the Niger below Bamako, and Nioro, the capital of Kaarta (250 miles north-west of Segou). The defeat of Ahmadu left the way open for an advance on Samori, whose capital, Bissandugu, was occupied in April. The advance down the Niger was steadily continued; in 1892 a boundary line was fixed with Liberia; in 1893 Jenne was occupied; and in 1894 Timbuktu was also occupied, the defeat of Colonel Bonnier by the Tuaregs in an ambushade being effectively avenged by Colonel Joffre. Samori, however, continued to give trouble; he menaced both Sierra Leone and the Ivory Coast, with the result that in December 1893 an unfortunate collision between French and British forces occurred at Waima.<sup>2</sup> In 1894-95, a force under Colonel Monteil was sent to protect the Kongs against Samori; but it made poor progress, and the commander was recalled. In 1898, however, a further advance by Lieutenant Woelfel from the Ivory Coast resulted in the overthrow and exile of that dangerous chief.

## (2) FRANCE AND THE UNITED KINGDOM

There still remained to be decided the extent of French control of the Lower Niger and of the Eastern

<sup>1</sup> Treaty in Annex F (No. 2) of C. 6701, pp. 24-26. On p. 24 the date is incorrectly printed as February 21, 1891. The correct year is given on pp. 3, 25, 26. Article VIII of this treaty bound Samori to do his utmost to direct goods from his country to French ports.

<sup>2</sup> See Cd. 1076 for the award of the Arbitrator, who decided that the blame rested largely with the French forces.

Sudan. The Arrangement of August 10, 1889, with Great Britain, left the spheres of the two Powers north of 9° north latitude in the region of the Gold Coast and the Niger indeterminate; and a declaration of August 5, 1890, recognised the sphere of influence of France south of her Mediterranean possessions up to a line drawn from Say on the Niger to Barrua on Lake Chad, though a simultaneous exchange of Notes recorded the fact that the agreement was to be without prejudice to any claims which Turkey might have to the south of Tripoli. France made definite efforts to advance in both directions. In 1897 Bussa and Nikki were occupied, and preparations were made for the advance by Marchand from the Congo, which ultimately led him to Fashoda.

More friendly relations between France and Great Britain were, however, soon afterwards established. By the Convention of June 14, 1898, a definite frontier was laid down from the 9th parallel to the Niger, and from the Niger to Lake Chad. This agreement allowed France to advance to a point ten miles north of Illo, and permitted the retention by her of Nikki, of a great part of Borgu, and of some parts of Gando. Though obliged to withdraw from Bussa, and being thus excluded from the navigable waters of the Lower Niger, she was allowed to lease two small plots of land on the river below Bussa for purely commercial purposes. The Declaration of March 21, 1899, by assigning a boundary which preserved the province of Darfur to the Anglo-Egyptian Sudan, debarred France from access to the Nile Valley. In return, she secured exclusive powers of extension in the kingdoms of Chad, Baghirmi, Wadai, and Kanem.

It remained, however, to effect the subjugation of Rabah, formerly a lieutenant of Zubeir Pasha, who had proclaimed himself Sultan of Bornu in 1893, and who was prepared to resist to the utmost the establishment of French supremacy over the Lake Chad kingdoms. Expeditions were despatched against this warlike chief from the French Congo under Gentil;

from Algeria under Foureau; and also from Senegal. The last-named expedition met with disaster, due to the misconduct of two of its leaders; but in 1900 Rabah was finally defeated and slain. His son, Fadl'-Allah, retreated to the territory on the Niger ascribed to Great Britain under the Convention of 1898. He was pursued thither by a French force and killed in 1901. The French continued their advance and entered German territory at Dikoa, but retired on the approach of German troops. The episode showed the necessity of frontier delimitation, and the Anglo-French Convention of April 8, 1904, provided a new frontier, which was designed to facilitate communication between French West African and Equatorial possessions.

The boundary between the French Sudan and the Gold Coast was defined by an exchange of Notes of March 18—April 25, 1904, supplemented by a further exchange of Notes of May 24—July 19, 1906. The boundary east of the Niger was determined by the Convention of May 29, 1906, supplemented by an exchange of Notes of May 17—July 1, 1911.<sup>1</sup>

### (3) BOUNDARY WITH TOGOLAND

The boundary with Togoland was defined by the Convention of July 23, 1897, and definitely marked out by the Declaration of September 28, 1912.<sup>2</sup>

<sup>1</sup> Cd. 6013.

<sup>2</sup> *State Papers*, cvi, 974-1008.

### III. SOCIAL AND POLITICAL CONDITIONS

#### (1) RELIGIOUS

RELIGIOUS conditions are described in *French West Africa*, No. 100 of this series.

#### (2) POLITICAL

The French Sudan originally included territory which in 1902 was assigned to the West African colonies; in 1904 it became part of the Government-General of West Africa, the protected territories on the left bank of the Senegal being combined with the old colony of Senegal. The new colony of Upper Senegal and Niger, then constituted, was made up of the old territories of Upper Senegal and Middle Niger, together with the first, second, and third Military Territories, and was organized in two parts: one, which included the former second Military Territory, under civil administration, and the other, the Military Territory of the Niger, corresponding to the first and third Military Territories. The seat of government of the Military Territory of the Niger was at Timbuktu, and was under the control of a Commandant, subordinate to the Lieutenant-Governor of the Colony. Since 1910, however, the position has been altered. Civil administration has been extended to Timbuktu and other territories on the right bank of the Niger, and the Military Territory, now pushed back to the north and east, and augmented since 1916 by the inclusion of the region of Tibesti, is administered by a Commissioner of the Government-General at Zinder, under the immediate direction of the Governor-General; the budget of the territory is also subject to the control of the Governor-General.

In one important matter the judicial regime in force

in West Africa generally is modified in its application to the region of Timbuktu and the Military Territory. The Courts of the subdivisions must be presided over by a European officer, and the assessors have only a consultative, and not a deliberative, voice. Moreover, in accordance with the distinction between Mohammedans and non-Mohammedans and between nomad and sedentary tribes, the assessors must be so chosen that in the event of parties under different systems coming before the court, an assessor representing each system shall be present.

### (3) MILITARY ORGANIZATION

See *French West Africa*.

### (4) PUBLIC EDUCATION

See *French West Africa*.

## IV. ECONOMIC CONDITIONS

### (A) MEANS OF COMMUNICATION

#### (a) Roads

IN Upper Senegal and Niger the French Government has created a network of roads connecting the chief centres with the railway or the river. The greater number of them are merely tracks with ditches for draining off the water. Although they have no artificial foundation, some of these tracks, such as those from Kayes to the Faleme, from Kita to Bamako, from Mopti by Bandiagara to Wagadugu, can be used for motor traffic in the dry season; but in the wet season they are impassable, except for riders who can either swim the water-courses or cross them in ferries. The best-built road is that from Bamako to Bobo-Diulasso, *via* Buguni, which is, after the railway and the River Niger, the most important artery of traffic in the colony.

In the Military Territory of the Niger the chief tracks are the following:—

- (1) Gaya to N'Gigmi, *via* Dogonduchi, Madawa, Tessawa, Zinder and Maine-Soroa (1,406 km.);
- (2) Gaya to Niame, *via* Dosso (289 km.);
- (3) Niame to Dogonduchi (244 km.);
- (4) Madawa to Tahua (147 km.);
- (5) Dogonduchi to Tahua (247 km.);
- (6) Tahua to Agadez (400 km.);
- (7) Madawa to Maradi (147 km.);
- (8) Maradi to Tessawa (116 km.);
- (9) Zinder to Agadez (385 km.);
- (10) Agadez to Bilma (610 km.);
- (11) Zinder to Gure (152 km.);
- (12) N'Gigmi to Bilma (500 km.);
- (13) Zinder to Kano (220 km.).

In Upper Senegal and Niger oxen are used for transport north of  $12^{\circ}$  north latitude in the wet season, and as far south as  $10^{\circ}$  north latitude in the dry; camels, which are unfortunately scarce, are used north of  $14^{\circ} 5'$  north latitude; donkeys can be used in all parts.

Head portage is still generally employed in both Upper Senegal and Niger and the Military Territory, though it is not so common as formerly. Transport is to a great extent in the hands of the Moors. The natives do not use animals for hauling vehicles.

### (b) Rivers

*The Senegal.*—The Senegal is fully treated in *Senegal*, No. 102 of this series.

*The Niger.*—The Sotuba rocks, between Bamako and Kulikoro, divide that part of the Niger which lies within the colony into two sections: (1) the Upper Niger, the section above Bamako, connected with the coast by the French Guinea railway from Konakri to Kurusa; (2) the Middle Niger, from Kulikoro to Ansongo, which is reached from the coast by the River Senegal and the railway from Kayes to Kulikoro.

On the Upper Niger the section from Kurusa in French Guinea to Kangaba, 275 km. in length, is navigable except for a month beginning towards the end of January; from Kangaba to Bamako, a distance of 90 km., navigation is more difficult, and is possible during a few months in the year only. The public services do not possess any means of transport on this part of the Niger, but the merchants of Bamako have formed a fleet of barges, which are available for the use of private persons and of the administration. The mining companies of the Sigiri district in French Guinea also have a tug and some barges.

The Middle Niger, between Kulikoro and Ansongo, is navigable from July to January by steamers

drawing about 3 ft., and from January to March by boats drawing 2 ft.; navigation is impossible between the end of March and the end of June, except by small barges half loaded. Between Kulikoro and Kabara, the port of Timbuktu, the Service de Navigation maintains a regular transport service, the extension of which to Ansongo is under consideration. The departure of steamers from Kulikoro is arranged to correspond with the arrival of the mails and passengers from Senegal. The Service de l'Intendance provides transport by barges from Timbuktu to Ansongo, and thence to Niame and Gaya. The ports of Segou, Diafarabe, Mopti, Niafunke and Timbuktu are served regularly by steamers.

The vessels operating on the Middle Niger seem adequate to deal with the present traffic.

During the three months of low water, March 15 to June 15, native canoes play an important part in the trade of the colony. They are primitive light craft of small draught, handled by two or three natives. They can cross all the shallows, and their numbers compensate for their small capacity. As the harvest in the valley takes place at the moment when the river goes down and can no longer be used by steamers or large barges, this native fleet is of the highest importance, and in a normal year it may bring as much as 3,000 tons of cereals to Kulikoro. To improve the bed of the river so as to render it navigable by steamers and barges at low-water season would be an arduous and costly undertaking, which would not be justified in the present economic state of the country.

Various tributaries of the Niger, such as the Bani, the Sankarani, the Tinkisso, and the Milo are navigable for part of their courses during the high-water season. Jenne is connected with the Niger both by the Bani and by a deep natural canal which joins it to the port of Koakuru.

*The Black Volta.*—The upper part of the Black Volta is navigable for about 350 km. south of Kury,

from June to March inclusive, by barges of not more than 5 tons burden.

(c) *Railways*

The partially constructed Thies—Kayes railway, 44 km. of which, from Ambidedi to Kayes, lies within the colony of Upper Senegal and Niger, is described in *Senegal*, No. 102 of this series.

The only railway which for its entire length lies within Upper Senegal and Niger is the Kayes—Niger line, which forms an important link between the rivers Senegal and Niger. It reaches the Niger at Bamako, and thence follows the river to its terminus at Kulkoro, the total length being 553 km. There is a branch to Medine, 2 km. in length, which leaves the main line at a point 10 km. from Kayes.

The railway was begun in 1881 and completed in 1904. The cost of construction was 49,570,177 francs (£1,982,807), of which 21,858,239 francs (£874,329) was paid by the French Treasury, while the remainder of the debt was to be discharged by annual subventions, contributed jointly by the French Treasury and the Government of French West Africa. At the rate of payment fixed the amount will not be paid off till 1928. In accordance with a law passed in 1907, the finances of this railway are treated in a separate budget attached to the General Budget of French West Africa. Profits are employed to maintain a reserve fund of a maximum of 1,500,000 francs to cover bad years, a similar fund of 1,500,000 francs for establishment works, and a floating capital of a maximum of 2,000,000 francs for general working expenses, any surplus being divided between the French Treasury and the General Treasury of French West Africa in proportion to their contributions towards the cost of construction. If there is an adverse balance which cannot be met by the reserve fund, the deficit is covered by a subsidy from the General Budget.

The receipts and expenditure of this railway for the years 1910-13, and the number of passengers and

weight of goods carried in 1912 and 1913, were as follows:—

—	Receipts.	Expenditure.	Goods.	Passengers.
	Francs.	Francs.	Tons.	
1910 .. ..	2,883,877	1,880,81	—	—
1911 .. ..	2,727,716	1,933,21	—	—
1912 .. ..	2,524,920	1,870,753	36,624	145,756
1913 .. ..	2,236,226	1,888,377	65,759	144,160

The fact that in 1913 the receipts fell though the traffic increased was due to a lowering of the tariffs.

The value of the Kayes—Niger railway to the colony is but imperfectly indicated by its financial returns. It is necessary to take into account the increased prosperity of the country since its construction, a prosperity clearly reflected in both the General and the Local Budgets. The material benefit which the colony has derived from the railway has long since repaid the expense of its construction.

The French have a far-reaching scheme for further railway construction in French West Africa, which will include the linking together of the railways already existing in the various colonies. A line is to be constructed from Bamako to Buguni, and the present French Guinea line prolonged to meet it. The Ivory Coast railway is to be extended through Kong and Diebugu to Boromo on the Black Volta; and the Dahomey railway is to be extended through Paraku, Jugu, Kwande, and Fada N'Gurma to Wagadugu. These lines are eventually to be connected by a line from Buguni to Diebugu and Wagadugu, to be continued to Ansongo on the Niger. Another line is to link the French Guinea line with the Thies—Kayes railway; and a branch will run from Paraku, on the extended Dahomey railway, to Gaya in the Military Territory of the Niger. Of these lines, however, only that from Bamako to Buguni is likely to be built in the near future.

The project of a trans-Saharan line, joining French West Africa to Algeria, has been the subject of much discussion, and various surveying expeditions have been sent out, but there does not appear at present to be any prospect of the accomplishment of this scheme.

(d) *Posts and Telegraphs*

The European mail for Upper Senegal and Niger is brought by sea to Dakar, and thence forwarded by rail, river, and carriers. Mails for the Military Territory of the Niger go *via* Dahomey or the Sudan. Recently a weekly mail to this region, *via* Liverpool, Lagos, and Kano, has been instituted. Postal matter from Paris to Zinder by this route is 26 days in transit.

In 1915 there were seventy-three post and telegraph offices in Upper Senegal and Niger, and twelve in the Military Territory of the Niger. There is to be a telegraph line from Algeria to Timbuktu, where a wireless station is to be established.

(B) INDUSTRY

(1) LABOUR

The Europeans in the regions under consideration have hitherto had no difficulty in securing sufficient labour for their needs, which, of course, have seldom been great. As regards the future, while it is true that the nomadic peoples of the north are not likely to be of much value as a source of labour, the semi-nomadic tribes and the sedentary negroid inhabitants of the south will probably be able to satisfy all demands on their services for a long time to come. The Peuls, who are semi-nomadic, should prove useful as herdsmen, for they show remarkable skill in the management of cattle. As for the negroid races, they are generally docile and, for Africans, industrious, while some of them, particularly the Sarakoles, produce efficient artisans and mechanics. They should prove of great assistance in the economic development of the colony and the Military Territory.

## (2) AGRICULTURE

(a) *Products of Commercial Value*

(i) *Vegetable Products*.—In these regions there are several distinct zones of vegetation. The extreme north is mere desert, with the flora characteristic of such areas. The northern Sahel, with the sandstone steppe in the north of the Niger Bend, and the less sterile parts of the Air, Adghagh, and Tilesi, are clothed with the steppe flora. Wide tracts of mimosa scrub are a striking feature of these regions, but forest trees are entirely absent. Useful fibre-yielding plants are common, and one or two cereals grow wild. South of  $17^{\circ} 15'$  north latitude the savannah type of vegetation appears, with somewhat richer pasture. The principal trees of this belt belong to the acacia family. Within this comparatively arid zone the great river beds form oases which possess a more luxuriant flora of the Sudan type. The true Sudan zone, lying approximately south of  $14^{\circ}$  north latitude, is marked by the presence of forest trees and an abundant and varied vegetation.

The majority of the population are engaged in agricultural or pastoral pursuits. No estimate of the area under cultivation has been made. In most parts of the country only the land round the villages is cultivated, and the produce is all consumed locally.

The chief agricultural products of commercial value are noticed below:—

*Castor Bean*.—Two varieties of the castor bean are found in the colony, but only one, the smaller, is of importance. The shrub grows well and produces twice a year. Besides being employed in pharmacy, the oil of this plant is used in the manufacture of perfumes and for lubricating purposes. It is probable that its cultivation could be profitably developed, as the oil is increasingly used in connection with aviation.

*Cereals*.—*Maize* is cultivated in many parts of Upper Senegal and Niger, especially in the south. The trade in this produce is very small, and there is no export.

Considerable quantities of *millet* are grown in Upper Senegal and Niger, and in the southern parts of the Military Territory. The price at which it is sold is very low, not exceeding five centimes the kilogram. In the economic life of the colony it holds much the same place as in French Senegal. (See *Senegal*, No. 102 of this series.)

*Rice* is extensively cultivated in Upper Senegal and Niger, frequently replacing millet as the staple food crop. It is grown principally in swampy ground and in tracts flooded by the rivers in the rainy season. Mountain rice, which used to be extensively cultivated, is now grown in only a few plantations in the south.

In most parts of the colony nearly all the rice produced is consumed by the growers and their neighbours, very little finding its way to the markets. There is, however, an important local trade in that grown in the middle valley of the Niger, particularly in the region of Jenne, Mopti, and Issa-Ber, and between Gao and Tillaberry (in the Military Territory). Rice from these parts is brought in large quantities to Timbuktu, Sarafere, Segu, Bamako, and Kayes; and several hundred tons are annually exported to Guinea by the Upper Niger. The price is very variable, but as a rule is about double that of millet.

The regions in which the production of rice for export might be developed are, first, the islands in the River Niger, which will have easy communication with Dahomey as soon as the projected railway extensions are carried out, and, secondly, that part of the Niger valley which lies between Segu and Timbuktu. The latter district is already a great centre of production, and might become in future the chief source of supply for Senegal and French Guinea, which at present have to import great quantities of rice from Indo-China. Of late years various European firms at Mopti have interested themselves in the rice trade, and a rice mill has been erected in the town.

*Wheat* is cultivated in Upper Senegal and Niger in the neighbourhood of Gundam, and in several parts of

the Military Territory of the Niger. The variety grown gives as high a proportion of flour as most European wheat. The total production is, however, small, and the trade is purely local. The cultivation of this crop could probably be considerably extended in all the valley of the Middle Niger, as it can be grown after the rice is harvested; but the local demand for wheat will never become great, as rice and millet are much cheaper; and export to Europe, and even to Senegal, is impossible owing to the cost of transport.

*Cotton.*—Cotton grows better in Upper Senegal and Niger than in French Senegal, and the annual production of native cotton may be estimated at about 1,000 tons. There is a fairly active internal trade and a growing export, but the greater part of the cotton is used by the producers. From the principal centres of production, Mossi, Segou, Kury, and Kutiala, it is sent in the form of woven bands and garments to important centres of the colony, such as Bamako, Timbuktu, Dori, and Sikasso.

In view of the fact that the cotton industry of France is entirely dependent on supplies from territories belonging to other States, attention has been drawn to the possibility of growing cotton on a large scale in French West Africa, and in 1903 the Association Cotonnière Coloniale was founded by the General Syndicate of the French cotton industry. At first the efforts of the Association were directed solely to the introduction of foreign varieties of cotton into West Africa, as the native crop was considered to be too short in fibre and too unequal in quality to be suitable for use in European factories. Experiments have shown that American cotton will grow well and produce a good yield in certain parts of Upper Senegal and Niger. Nevertheless, the plantations have not been successful, owing to mistakes in the choice of locality, lack of rain, the prevalence of parasites, the ignorance of the natives, and other causes, and, although the experiments have not been abandoned, greater hopes have of late been set on the improvement of the local

variety. The country is certainly capable of an increased production of native cotton, but little advance can be looked for until the natives are induced to adopt better methods of cultivation. At present there are in the colony three ginneries under the direction of the Association Cotonnière—at Segou, M'Pesoba (Kutiala district), and San. The amount of raw cotton bought by the Association increased from 25 tons in 1907-8 to 400 tons in 1913-14.

*Fibres.*—*Bombax buonopozense* is abundant, and the silky hair contained in the fruit-pods furnishes one of the fibres known as *kapok*, which is much used in the manufacture of life-saving apparatus and surgical dressings. The kapok of Upper Senegal and Niger appears to be as valuable as that of Java, the chief source of this commodity, and it is hoped that the colony may in future produce very large quantities. The exploitation of kapok in French West Africa is very recent; in 1913 the export from Upper Senegal and Niger amounted to 27 tons, as against 8 in 1912. Another important fibrous plant is *Hibiscus cannabinus* known locally as *da*. It is cultivated principally along the rivers and streams, and the fibre is used by the natives for the manufacture of fishing nets and strong cord. It is very like Indian jute, and could be used in Europe for the manufacture of coarse textiles, cords, sacks, cables, and nets. Hitherto the crop has been absorbed locally, selling in the markets along the Niger at 14 francs the 100 kg., but in 1913 the first export, of 5 metric tons, was made, and further trade might be developed.

The *tien* or *kien*, grown in the millet fields, produces a fibre which, though short, is stronger than that of *da*, and deteriorates less in contact with water; it is therefore preferred by the natives for the manufacture of nets. The local price is about 50 francs the 100 kg., but samples were valued at 720 francs the ton by experts at the Franco-British Exhibition. Other fibres are obtained from the bark of the baobab, the

*Leptadenia spartum*, and the togoyo (*Melochia corchorifolia*).

Various attempts have been made to introduce foreign fibrous plants, such as the sisal (*Agave rigida sisalana*) and the *Furcraea gigantea*. Both flourish, but the sisal is the more remunerative. Various plantations have been made, and appear to be thriving, but it is impossible as yet to judge of the ultimate result of the experiment. Machinery has been introduced by some of the colonists for the preparation of the crop, and in 1914 sisal to the value of 6,000 francs was exported from Upper Senegal and Niger.

*Ground-nuts.*—The ground-nut is found throughout Upper Senegal and Niger, but is most plentiful south of 15° north latitude. It is not, however, of nearly so much importance as in French Senegal, which, moreover, produces a better variety. In 1913 Upper Senegal and Niger exported 8,577 tons of ground-nuts, and in 1912 5,830 tons. As the ground-nut is a cumbersome product, it can be exported only during the flood season, when large boats are able to reach Kayes, and it has therefore to be stored from January to August or September. This inconvenience, with the attendant risk and expense, has seriously hindered the development of the trade. Transport, too, is costly, and the price commanded by nuts from Upper Senegal and Niger is lower by 7 or 8 centimes a kilogram than that commanded by nuts from Senegal. The trade will probably develop greatly after the completion of the Thies—Kayes and Bamako—Buguni railways.

In the Military Territory of the Niger ground-nuts are also grown, but there is no export.

*Gum.*—The Adrar, the Kaarta, and the steppes in the neighbourhood of Timbuktu are covered with the *acacia verek*, from which the greater part of the gum produced in the colony is derived. The commercial importance of gum, however, has decreased of late years. In 1913 the export amounted in value to 362,558 francs.

*Rubber.*—The whole of the southern part of Upper Senegal and Niger as far as 11° north latitude abounds in wild rubber vines, especially *Landolphia heudelotii*, which are found also, though less plentifully, up to 13° north latitude. Rubber was formerly one of the most important products of the Sudan zone, but in recent years there has been a rapid decrease in the value of the export, owing chiefly to the growing competition of plantation rubber. The enforcement of the decree which, with a view to the prevention of fraud, forbade the circulation of rubber, except in the form of flat plaques or thongs, has also contributed to the decline. In spite of all measures taken to improve the quality of West African rubber and the encouragement given to its cultivation by the Government, it is feared that it will not again realise the former high prices, and efforts are being made to turn the energies of the natives to other products. There was, however, a slight revival in the trade towards the end of 1914.

The exports of rubber from Upper Senegal and Niger in the last few years before the war were as follows:—

					Kg.
1909	...	...	...	...	241,289
1910	...	...	...	...	865,480
1911	...	...	...	...	258,624
1912	...	...	...	...	161,983
1913	...	...	...	...	83,353

*Sesame.*—The Government of Upper Senegal and Niger has endeavoured to develop the cultivation of sesame, which is grown in the villages. At the agricultural station at Kulikoro a yield of 2,000 to 2,500 kg. per hectare has been obtained, about twice the normal yield. Sesame is, in certain respects, superior to the ground-nut, for it produces more oil in proportion to its weight, and fetches a higher price per ton—very considerable advantages in a country where means of communication are poor. The native, however, prefers

the ground-nut, which requires less care, is a favourite food, and provides fodder for cattle. The export of sesame from Upper Senegal and Niger increased from 16 tons in 1912 to 50 tons in 1913.

*Shea Butter.*—The nut of the shea tree (*Butyrospermum parkii*) yields a vegetable butter which is extensively used by the natives for cooking, lighting, and soap-making. The tree grows wild in Upper Senegal and Niger, and is also cultivated. Shea butter is used for the manufacture of margarine and candles by English, Dutch, and German firms. The harvest is from June to September. The nuts, after being dried in the sun, are put in the ground, where the shells peel off; they can be preserved in this way for several months. The butter, which is prepared by a somewhat complicated process, is made in small quantities as it is needed. In 1911 shea nuts and butter were for the first time exported from the colony; the amount despatched in that year was 293 tons, and in 1912 the export rose to 847 tons. The trade has hitherto been seriously impeded by the difficulties of navigation on the River Senegal, but will be considerably facilitated by the completion of the Thies—Kayes railway.

The manufacture of shea butter has been undertaken by several European firms in the colony. The firm of Devès & Chaumet has recently established a factory at Beneni, near San, from which butter is exported in metal casks. There seems every reason to believe that this enterprise will be successful.

It may be added that the wood of the shea tree is of great constructional value and excellent for cabinet-making, but in Upper Senegal and Niger it is illegal to cut it, except on private property.

*Vegetable Ivory.*—Vegetable ivory is obtained from the fruit of the rônier and doum palms, the former being much the more important source. The kernel of the rônier nut is very hard, and is similar to that of the Guayaquil nut, which is used in Europe for the manufacture of buttons and other objects in imitation

ivory. In 1910 a Mme. Perchso was granted authority to exploit the *rônier* palm in the forest of Sero in Upper Senegal and Niger.

*Other Products.*—Among crops grown by the natives for their own use are tobacco, indigo, cassava, yams, sweet potatoes, beans, and fonio (*Paspalum longiflorum*); the last named is cultivated particularly in the south of Upper Senegal and Niger, where it to some extent replaces millet. Many European vegetables, such as potatoes, haricots, peas, and asparagus, have been successfully introduced.

(ii) *Live-stock.*—The rearing of live-stock is one of the most important occupations in Upper Senegal and Niger and the Military Territory. It is carried on chiefly by tribes who are still in the pastoral stage of development, only one-eighth of the total head of stock being owned by the agricultural and artisan elements of the population. During the dry season the animals are driven in large herds to the neighbourhood of rivers or lakes, or to low-lying valleys where the herbage remains fresh. In the wet season, when pasture is everywhere abundant, they are taken back to the plateaux. Some tribes are nomadic and always accompany their herds. Others, who live in villages, send off their cattle for the dry season in the charge of herdsmen. The route taken by the cattle of a particular tribe is generally the same every year, and usually traverses tracts of country unappropriated by the native communities. The variety of the pastures renders the beasts healthy and vigorous, but there is no breeding on principles of methodical selection.

Of late, non-pastoral tribes have also been steadily increasing their herds. Their cattle are often entrusted to the care of Peul or Tukuler herdsmen, and, except in a few districts where milk is valuable and the cows are given a ration of millet flour or ground-nut straw, they do not provide artificial food for their beasts. Little meat is consumed, except in the towns, and the animals are never fattened.

In 1914 there were in Upper Senegal and Niger alone 2,000,000 cattle and upwards of 3,000,000 sheep and goats. There are several breeds of cattle in the colony. A humped or zebu breed prevails north of a line passing through Bakel, Kayes, Nyamina, and Kury, but does not flourish in the moist Sudan zone, as the animals are very susceptible to the attacks of the tsetse fly. In the south the Futa Jalon and also the dwarf Mossi oxen are kept. The natives of the south frequently cross their cattle with those of the zebu breed with a view to raising bigger animals with a larger yield of milk. Towards the southern limits of the colony, however, little zebu blood can be introduced, for fear of undermining the power of resisting the tsetse fly which is possessed by the southern breed.

There are eight breeds of sheep in the Sahel and steppe regions; of these only one, the Macina, is wool-bearing. Further south a small moufflon sheep, probably indigenous to the Futa Jalon, is kept. The Government of Upper Senegal and Niger has endeavoured to improve the breed of the Macina sheep by the introduction of Algerian merinos, and in 1908 a sheep-breeding station was established at Niafunke. The experiments in crossing have been quite successful, and several half and three-quarter bred rams have been distributed to the natives. The wool is for the most part used in the country for making clothes; but about 300 tons were exported in 1914.

Owing to the influence of Islam among the natives there are few pigs in either the colony or the Military Territory.

Upper Senegal and Niger is the chief centre of horse-breeding in French West Africa. About the year 1911 the total number of horses in Upper Senegal and Niger and the Military Territory of the Niger was 103,722, out of a total for French West Africa of 125,000. They are not found in the south of the colony. A stud was formed by the Government of Upper Senegal and Niger in 1905, and has rendered very valuable service

in the improvement of the breed. More than 2,000 horses are exported yearly.

Donkeys are numerous; they are small but very vigorous. In the Military Territory the Tuareg tribes breed large numbers of camels.

No exact figures regarding the export of animals can be given, as most of those from the Sudan zone go to the colonies to the south, crossing the frontier by many paths. The annual export from Upper Senegal and Niger is estimated at about 40,000 cattle and 60,000 sheep and goats. The losses *en route* are considerable, sometimes as much as 20 per cent. The export is almost entirely in the hands of the natives, and it does not appear that European companies could take it up with profit. The greater part of the export trade is carried on with the coast colonies, but cattle are also supplied to the Cape Verde and Canary Islands for the provisioning of the ships which call there. It is improbable that there will ever be a large export of cattle to Europe, owing to difficulties of transport. The possibility of facilitating the movement of cattle from the colony to the coast was considered in 1912, and it was recommended that wells should be dug in the Ferlo region of Senegal to make it traversable during the dry season. This would enable the animals coming from the Sudan zone to reach the ports by different routes, and would reduce the ravages of epidemics, which break out on the present crowded tracks. In 1912 an attempt was made to export live cattle to France, but it was abandoned in 1913, and the export of frozen and preserved meat substituted. In both the colony and the Military Territory there is a considerable surplus of hides, which is exported. Efforts are being made to improve the quality of this product.

Fowls, ducks, and other poultry are kept in considerable numbers.

Ostriches are found wild throughout the Sahel and Timbuktu regions. They are hunted for their feathers, and also used to be bred in captivity

by the natives for food, though this practice appears to be decreasing. Most of the plumes used for decorative purposes come from the wild birds. The French have at different times established model ostrich farms in Upper Senegal and Niger, but so far without success. The aigrettes and marabut storks of the Niger, nearly exterminated by feather hunters, are now strictly protected.

### (b) *Methods of Cultivation*

As regards the agricultural methods of the natives, what is said in *Senegal*, No. 102 of this series, applies equally well to the territories covered by this volume. It may be added that in Upper Senegal and Niger the Government is contemplating the construction of important irrigation works in the Niger valley and in the country north of Timbuktu.

### (c) *Forestry*

In the Sudan zone the woods resemble European coppices where here and there forest trees have been left standing. In the wet low-lying lands the trees grow close together and are straight; on the sides of the hills and the plateaux the vegetation is stunted and scarce, and large stretches of land are comparatively bare. Dense woods are rare, existing in the south only on rich land which has not yet been cultivated. Most of the forest regions are of the savannah type, the trees growing in clumps separated by pasture.

Many kinds of wood serviceable in building and cabinet-making are found. There is, however, no established timber trade. The Public Works Department cuts what it requires for immediate use, but most of the building wood used by Europeans is imported from Europe.

The constant and rapid diminution of the forests in certain parts of French West Africa is receiving the

anxious attention of the Government. Steps are now being taken to protect certain areas where devastation has been particularly serious. Legislative measures have placed restrictions on the cutting of wood, and forest reserves have been created.

#### (d) *Land Tenure*

The conditions of land tenure are described in *Senegal*, No. 102 of this series.

### (3) FISHERIES

The rivers in Upper Senegal and Niger are full of fish. The Somonos and the Bozos, who live on the banks of the Niger, and the Banis, are the chief tribes who fish in the rivers; the others merely fish during the season of low water in the little streams and the marshes. There is a considerable local trade in fish, which is sometimes sent to distant markets, and a small quantity is exported to Upper Guinea.

### (4) MINERALS

The mineral resources of the territories under consideration do not appear to be of great importance, but so far they have not been fully investigated.

*Gold* constitutes the chief mineral wealth. The extent of the auriferous earths has not yet been fully ascertained, but the chief deposits appear to be in the basin of the Faleme and other parts of the Bambuk region; in the Mandingo district, south-west of Bamako; and in the Lobi country, on the frontiers of the Ivory Coast and the Gold Coast. All these have long been worked by natives, but only the Faleme basin, in which several companies have concessions, has as yet been exploited by Europeans. The Mandingo fields have rich veins in the watershed of the Bakhoy and the Niger. The Lobi deposits are probably the richest and

certainly the purest and most easily worked, but the difficulties of transport have so far prevented their exploitation. Gold is also reported to occur in the Yatenga region and on the Niger near Niame. In all these localities the gold is found both in veins in the hills and in alluvial deposits in the streams. It is usually pure, sometimes slightly alloyed with silver, and occurs in flakes, in fine dust, and occasionally in nuggets.

It is estimated that the native workings in Upper Senegal and Niger produce about 300 kg. of gold annually. With few exceptions the natives do not work the veins in the hills, owing partly to a lack of proper tools and partly to a superstition that the gold belongs to malignant devils. The alluvial deposits are worked during the dry season, from January to May, wells being specially dug from which the auriferous earths are extracted and subsequently washed in calabashes. Gold is also extracted by divers from the beds of the streams during the low-water season.

Various attempts have been made by Europeans to exploit the goldfields, but the only company at present working is the Compagnie des Mines de Sénégambie, which obtains gold by dredging in the Falemé and its tributaries. The lack of means of communication and transport constitutes a great obstacle to mining enterprise. Furthermore, the two most economical methods of working the alluvium, the Californian hydraulic method and dredging, cannot be employed to advantage. The former method, owing to lack of water power in the dry season, could be used for four months in the year only, except in the case of deposits near a large river. For dredging the river beds are often unsuitable.

*Iron* is abundant on the laterite; it occurs also in the mountains, in the form of hydroxide or magnetic oxide, and in the Yatenga as hæmatite. It is still mined in a primitive way by the natives on the banks of the Bakhoy, in the Fula Duga, the Mandingo, and

other districts, but the industry is declining owing to the importation of iron goods from Europe.

*Mercury, arsenic, and manganese* are found in the Bambuk region; the last also occurs on the Niger between Niame and Danza. *Sulphide of antimony* has been noticed at Bakel. *Copper* has been traced near Bafulabe, but has not been exploited.

The chief *salt* deposits are at Taodenit, 260 miles north of Timbuktu. Their resources are said to be practically unlimited, but their exploitation is hampered by the insecurity of the region. There are other salt beds at Djerma Ganda and in the Dosso country. In 1914 about 1,360 tons of salt were brought to Timbuktu by the caravans. The competition of European salt has caused a considerable decrease in this trade.

#### (5) MANUFACTURES

Of the native industries, which are very primitive, the most important are weaving, dyeing, tanning, smelting, and the manufacture of shoes, pottery, and jewellery. In Upper Senegal and Niger patterned woollen goods known as *casas* are produced, and are the objects of a considerable local trade. Handsome rugs of a mixture of wool and cotton are made in small quantities at Macina, Farimake, and Tioki, and are in great request among the natives.

A company has been formed with a view to installing in the neighbourhood of Bamako a factory for meat extracts, preserves, and animal by-products. This company has obtained a grant of land, and proposes to use the Sotuba falls to obtain electric power. It is estimated that the factory, when in full activity, will be able to deal with 30,000 to 40,000 head annually.

The only other European industrial undertakings in Upper Senegal and Niger are the ice factories at Kayes and Bamako, a kapok ginnery at Kayes, and cotton ginneries at Segou, San, and M'Pesoba.

## (C) COMMERCE

### (1) DOMESTIC

#### *(a) Principal Branches of Trade*

The principal lines of internal trade in the colony of Upper Senegal and Niger appear to run longitudinally. The northern region sends to the south cattle and salt; the southern region sends to the north kola nuts, imported textile goods, and ornaments; while from the country between these two zones grain, shea butter, and textiles are sent to the northern districts, and cattle, dried fish, and textiles to those in the south. The principal centres of internal trade are Bamako, Kayes, Timbuktu, Mopti, San, Sikasso, and Bobo-Diulasso.

In the Military Territory the greater part of the internal trade is concerned with millet, salt, oil, and articles of clothing of native manufacture. It is estimated that in 1912 the value of this internal trade was 1,200,000 francs (£48,000).

#### *(b) Towns, Markets, Fairs*

The administrative capital of Upper Senegal and Niger is Bamako-Kulaba. The seat of the Government and the houses of the officials are at Kulaba, on a plateau above the Niger; the commercial town is Bamako, situated below Kulaba on the banks of the river. There are railway workshops, fine schools, and, near by, a racecourse.

Kayes is the chief port of access to Upper Senegal and Niger. It is situated on the River Senegal, is a terminus of the Kayes—Niger railway, and, it is expected, will shortly be in direct communication by rail with Thies in French Senegal.

Timbuktu has lost much of its commercial importance since the cessation of the trans-Saharan traffic, and regains a semblance of its former activity only when the annual caravans set out to fetch salt from

Aruan or Taodenit. It has, however, a large native market.

Other noteworthy centres are Wagadugu, Jenne, Segu, Sikasso, Mopti, Bobo-Diulasso, Bandiagara, and Nioro. In all the important settlements a large market is held once or twice a week to serve the neighbouring districts, while there is a small one daily for the inhabitants of the town itself.

In the Military Territory of the Niger the chief centres of trade are Zinder, Niame, and Gaya.

*(c) Organizations to promote Trade and Commerce*

There are two Chambers of Commerce in Upper Senegal and Niger, one at Kayes and the other at Bamako.

*(d) Foreign Interests*

What is said under this head in *Senegal* (No. 102 of this series) is equally true of Upper Senegal and Niger and the Military Territory.

(2) FOREIGN

*(a) Exports and Imports*

*Upper Senegal and Niger.*—It is impossible to obtain accurate figures to show the development of the foreign commerce of Upper Senegal and Niger. The trade passes by four routes; by the River Senegal through Kayes, through French Guinea, through other southern colonies, and across the frontiers of the Sahara. The official figures refer, as a rule, only to the merchandise carried by the first of these four routes, and therefore give a very imperfect impression of the real extent of the colony's foreign trade. Further, the proportion of the total trade passing by the Senegal route has not been constant; since the opening of the railway from Konakri to Kurusa, there has been a great increase in the amount of the

imports through French Guinea. Lastly, many of the goods imported into Upper Senegal and Niger through other French colonies are included in the official returns for those colonies, and although goods registered at St. Louis in Senegal as in transit for Kayes are now counted among the imports of Upper Senegal and Niger, this method of computation has been in use only since 1911, and seems not to have been adopted at any other port of French West Africa. This change in the system of compiling the statistics of the import trade through Senegal must be borne in mind, as it is almost entirely responsible for the remarkable difference between the figures of 1910 and 1911 (see Appendix, Table I). On the other hand, the subsequent fall in the figures for the foreign trade of Upper Senegal and Niger reflected a real decline, though this was due to accidental and temporary causes. Trade was particularly bad in 1914, owing partly to the Great War, but still more to a destructive drought.

The chief articles imported into Upper Senegal and Niger are textiles, wines and spirits, sugar, salt, paper goods, metal goods, and preserved meat; the principal articles of export are cattle, ground-nuts, millet, hides and skins, rubber, gum, gold, wool, and shea nuts.

By the Senegal route manufactured goods, timber, preserved foodstuffs, sugar, and salt are imported; ground-nuts, hides, rubber, gum, and shea nuts are exported.

Through French Guinea textiles and foodstuffs are imported into the central districts of the colony; and hides, gold, rubber, wool, and cotton are the chief commodities exported by this route.

Through the other southern colonies kola nuts and various articles of European origin are obtained, the exports by this route consisting mainly of live stock.

Across the frontiers of the Sahara salt is imported, and cereals and textiles are exported.

The foreign commerce of the colony is almost entirely in the hands of French houses. The total amount of

European capital engaged in the country is between 25,000,000 and 30,000,000 francs.

*Military Territory of the Niger.*—The frontier trade of the Territory is mainly carried on with Nigeria. The north of Nigeria is thickly populated, and constitutes an important and increasing market for the millet and cattle produced in abundance in the southern part of the Military Territory. Most of the imports of the Territory come through Nigeria, for the railway from Lagos brings to Kano manufactured articles, tinned provisions, and sugar, which can be sold at Zinder more cheaply than similar goods which arrive *via* Dahomey, the Sudan, or the Algerian oases. In 1913 there was no customs service in the Territory, and it was therefore impossible to obtain accurate statistics of its commerce. An official estimate put the total value of its external trade in 1913 at 2,053,677 francs (£82,147), of which imports accounted for 861,897 francs (£34,476), and exports for 1,191,780 francs (£47,671). Goods from Nigeria, principally British textiles, represent about two-thirds of the total value of the imports. In attempting to estimate the volume of the external trade of the Territory it must be remembered that it serves as a corridor for a lively traffic between Nigeria and various French colonies.

Commercial relations with Tripoli, completely suspended at the time of the Italian expedition, have not been resumed, and it is probable that in future they will be limited to a local commerce between the tribes in the north of the Territory and those in the south of Tripoli.

In 1914 the export trade of the Military Territory suffered greatly from a drought. The official figures for the year give the value of the imports as 1,000,604 francs (£40,024), and that of the exports as 609,618 francs (£24,384). Such was the effect of the drought on the harvest that whereas there is normally an export to Nigeria of rice and millet, in this year a considerable import of grain was necessary.

(b) *Customs and Tariffs*

As from January 1, 1914, the tariffs of Upper Senegal and Niger and the Military Territory have been assimilated to those of Senegal. (See *Senegal*, No. 102 of this series.) There had previously been in operation, in both the colony and the Territory, a tax known as *ussuru*, i.e., an import duty of 10 per cent. on the value of all goods imported directly from territories belonging to foreign States. The incidence of this tax, however, was much limited by a Franco-British agreement of 1898, and after that date the only imports into Upper Senegal and Niger actually paying the tax were those coming by caravan from the Sahel and the Sahara. At the time of the abolition of the *ussuru* a tax of 10 per cent. was imposed on salt extracted at Taodenit.

(D) FINANCE

(1) *Public Finance*

The finances of the colony and of the Military Territory are administered partly by the general government of French West Africa under the General Budget created in 1904, and partly by the authorities immediately responsible for the regions in question. The chief expenses with which the General Budget is concerned are the charges on the debt and public works, while its chief source of revenue lies in customs duties. Of the revenues allotted to the Local Budget the greater part is derived from the poll-tax, which varies, according to the district, from 25 centimes to 5 francs, troops and children under 8 being exempt.

In 1913 the revenue of the Government of Upper Senegal and Niger was 9,679,584 francs (£383,183), and the expenditure 8,791,147 francs (£351,646); the revenue of the Government of the Military Territory was 1,590,155 francs (£63,606), and the expenditure

1,281,270 francs (£51,250). The following tables show the main items:—

*Revenue*

	Upper Senegal and Niger.	Military Territory of the Niger.
Direct taxation—	Francs.	Francs.
Poll-tax .. .. .	6,995,639	1,032,496
Patents and licences .. .. .	85,142	9,645
Dues paid by pedlars .. .. .	114,990	36,789
Indirect taxation—		
<i>Ussuru</i> and pasturage charges.. .. .	209,592	219,466
Posts and telegraphs .. .. .	240,902	20,408
Domain lands .. .. .	72,878	—
Market dues .. .. .	640,622	62,463
River navigation .. .. .	375,513	—
Subsidy from General Budget .. .. .	—	135,000
Excess over the maximum of the Reserve Fund .. .. .	487,917	—
Other receipts .. .. .	456,389	73,888
Total .. .. .	9,679,584	1,590,155

*Expenditure*

	Upper Senegal and Niger.	Military Territory of the Niger.
	Francs.	Francs.
Central administration .. .. .	338,022	140,818
Local administration of circles .. .. .	1,759,987	309,481
Treasury and collection of taxes.. .. .	436,850	51,129
Justice .. .. .	27,449	4,876
Education .. .. .	340,671	11,530
Police and prisons .. .. .	1,294,450	259,710
Sanitary service and poor relief .. .. .	430,387	39,536
Posts and telegraphs .. .. .	947,520	144,059
Public works .. .. .	990,661	59,527
River navigation .. .. .	469,277	1,427
Travelling and transport expenses .. .. .	908,709	197,445
Other expenses .. .. .	847,164	61,732
Total .. .. .	8,791,147	1,281,270

A Reserve Fund has been formed for the Local Budget of Upper Senegal and Niger, with a fixed minimum of 1,000,000 francs. On May 31, 1914, the cash in hand was 2,009,887 francs. The Military Territory has no special Reserve Fund of its own, but in 1913 it contributed 308,885 francs to the Reserve Fund of the General Budget.

### (2) *Currency*

French gold and silver are used, especially the five-franc piece, and, owing to the proximity of the British colonies, British gold is very common. The scarcity of bronze coinage in the Military Territory causes great inconvenience and raises the cost of living; it results also in a tendency for the natives to return to the primitive methods of barter. By reason of its convenience bronze coinage is highly appreciated by the natives, who often give it a value superior to its face value; thus a native has been known to exchange a 50-centime piece for 35 centimes in copper. This depreciation of silver occurs especially in the case of coins of the lower denominations.

## APPENDIX

### EXTRACTS FROM TREATIES, &C.

#### I

#### DECLARATION BETWEEN THE BRITISH AND FRENCH GOVERNMENTS, AUGUST 5, 1890.<sup>1</sup>

*Art. II.*—The Government of Her Britannic Majesty recognizes the sphere of influence of France to the south of her Mediterranean Possessions, up to a line from Saye on the Niger, to Barruwa on Lake Chad, drawn in such manner as to comprise in the sphere of action of the Niger Company all that fairly belongs to the Kingdom of Sokoto; the line to be determined by the Commissioners to be appointed.

The Government of Her Britannic Majesty engages to appoint immediately two Commissioners to meet at Paris with two Commissioners appointed by the Government of the French Republic, in order to settle the details of the above-mentioned line. But it is expressly understood that even in case the labours of these Commissioners should not result in a complete agreement upon all details of the line, the Agreement between the two Governments as to the general delimitation above set forth shall, nevertheless, remain binding.

The Commissioners will also be intrusted with the task of determining the respective spheres of influences of the two countries in the region which extends to the west and to the south of the Middle and Upper Niger.

#### II

#### CONVENTION BETWEEN GREAT BRITAIN AND FRANCE, JUNE 14, 1898.<sup>2</sup>

*Art. III.*—From the point specified in Art. II, where the frontier separating the British and French possessions strikes the Niger, viz., a point situated on the right bank of that river, 10

---

<sup>1</sup> Hertslet, *The Map of Africa by Treaty*, London, 1909, II, p. 738.

<sup>2</sup> *Ibid.*, II, p. 785.

miles (16,093 metres) up-stream from the centre of the town of Gere (Guiris), (the port of Ilo), the frontier shall follow a straight line drawn therefrom at right angles to the right bank as far as its intersection with the median line of the river. It shall then follow the median line of the river, up-stream, as far as its intersection with a line drawn perpendicularly to the left bank from the median line of the mouth of the depression or dry water-course, which, on Map No. 2, annexed to the present Protocol, is called the Dallul Mauri, and is shown thereon as being situated at a distance of about 17 miles (27,359 metres), measured as the crow flies, from a point on the left bank opposite the above-mentioned village of Gere (Guiris).

From this point of intersection the frontier shall follow this perpendicular till it meets the left bank of the river.

*Art. IV.*<sup>1</sup>—To the east of the Niger the frontier separating the British and French possessions shall follow the line indicated on Map No. 2, which is annexed to the present Protocol.

Starting from the point on the left bank of the Niger indicated in the previous Article, viz., the median line of the Dallul Mauri, the frontier shall follow this median line until it meets the circumference of a circle drawn from the centre of the town of Sokoto with a radius of 100 miles (160,932 metres). From this point it shall follow the northern arc of this circle as far as its second intersection with the 14th parallel of north latitude. From this second point of intersection it shall follow this parallel eastward for a distance of 70 miles (112,652 metres); then proceed due south until it reaches the parallel of 13° 20' north latitude, then eastward along this parallel for a distance of 250 miles (402,230 metres); then due north until it regains the 14th parallel of north latitude; then eastwards along this parallel as far as its intersection with the meridian passing 35' east of the centre of the town of Kuka, and thence this meridian southward until its intersection with the southern shore of Lake Chad.

The Government of the French Republic recognizes, as falling within the British sphere, the territory to the east of the Niger, comprised within the above-mentioned line, the Anglo-German frontier, and the sea.

The Government of Her Britannic Majesty recognizes, as falling within the French sphere, the northern, eastern, and southern shores of Lake Chad, which are comprised between the point of intersection of the 14th degree of north latitude, with the western shore of the lake and the point of incidence on the shore of the

---

<sup>1</sup> A modified line of boundary, in substitution of that fixed by this Article, was laid down in Art. VIII of the Convention of April 8, 1904, and finally agreed to in the Convention of May 29, 1906.

lake of the frontier determined by the Franco-German Convention of the 15th March, 1894.

[This Article was completed by Declaration signed at London on 21st March, 1899.]

## III

CONVENTION BETWEEN GREAT BRITAIN AND FRANCE,  
APRIL 8, 1904.<sup>1</sup>

*Art. VIII.*—To the east of the Niger the following line shall be substituted for the boundary fixed between the French and British possessions by the Convention of the 14th June, 1898 (No. 241), subject to the modifications which may result from the stipulations introduced in the sixth and seventh paragraphs of the present Article.

Starting from the point on the left bank of the Niger laid down in Art. III of the Convention of the 14th June, 1898, that is to say, the median line of the Dallul Mauri, the frontier shall be drawn along this median line until it meets the circumference of a circle drawn from the town of Sokoto as a centre, with a radius of 160,932 mètres (100 miles). Thence it shall follow the northern arc of this circle to a point situated 5 kilomètres south of the point of intersection of the above-mentioned arc of the circle with the route from Dosso to Matankari viâ Maourédé.

Thence it shall be drawn in a direct line to a point 20 kilomètres north of Konni (Birni-N'Kouni), and then in a direct line to a point 15 kilomètres south of Maradi, and thence shall be continued in a direct line to the point of intersection of the parallel of 13° 20' north latitude with a meridian passing 70 miles to the east of the second intersection of the 14th degree of north latitude and the northern arc of the above-mentioned circle.

Thence the frontier shall follow in an easterly direction the parallel of 13° 20' north latitude until it strikes the left bank of the River Komadugu Waubé (Komadougou Ouobé), the thalweg of which it will then follow to Lake Chad. But, if before meeting this river the frontier attains a distance of 5 kilomètres from the caravan route from Zinder to Yo, through Sua Kololua (Sua Kololoua), Adeber, and Kabi, the boundary shall then be traced at a distance of 5 kilomètres to the south of this route until it strikes the left bank of the River Komadugu Waubé (Komadougou Ouobé), it being nevertheless understood that, if the boundary thus drawn should happen to pass through a village, this village, with its lands, shall be assigned to the Government to which would fall the larger portion of the village and its lands. The boundary will then, as before, follow the thalweg of the said river to Lake Chad.

<sup>1</sup> Hertslet, *The Map of Africa by Treaty*, II, p. 816.

Thence it will follow the degree of latitude passing through the thalweg of the mouth of the said river up to its intersection with the meridian running 35' east of the centre of the town of Kouka, and will then follow this meridian southwards until it intersects the southern shore of Lake Chad.

It is agreed, however, that, when the Commissioners of the two Governments at present engaged in delimiting the line laid down in Art. IV of the Convention of the 14th June, 1898, return home and can be consulted, the two Governments will be prepared to consider any modifications of the above frontier line which may seem desirable for the purpose of determining the line of demarcation with greater accuracy. In order to avoid the inconvenience to either party which might result from the adoption of a line deviating from recognized and well-established frontiers, it is agreed that in those portions of the projected line where the frontier is not determined by the trade routes, regard shall be had to the present political divisions of the territories so that the tribes belonging to the territories of Tessaoua-Maradi and Zinder shall, as far as possible, be left to France, and those belonging to the territories of the British zone shall, as far as possible, be left to Great Britain.

It is further agreed that, on Lake Chad, the frontier line shall, if necessary, be modified so as to assure to France a communication through open water at all seasons between her possessions on the north-west and those on the south-east of the Lake, and a portion of the surface of the open waters of the Lake at least proportionate to that assigned to her by the map forming Annex 2 of the Convention of the 14th June, 1898.

In that portion of the River Komadugu which is common to both parties, the populations on the banks shall have equal rights of fishing.

#### IV

#### CONVENTION BETWEEN FRANCE AND GERMANY, JULY 23, 1897.<sup>1</sup>

*Art. I.*—La frontière partira de l'intersection de la côte avec le méridien de l'Île Bayol, se confondra avec ce méridien jusqu'à la rive sud de la lagune qu'elle suivra jusqu'à une distance de 100 mètres environ au delà de la pointe est de l'Île Bayol, remontera ensuite directement au nord jusqu'à mi-distance de la rive sud et de la rive nord de la lagune; puis suivra les sinuosités de la lagune à égale distance des deux rives jusqu'au thalweg du Mono, qu'elle suivra jusqu'au 7<sup>e</sup> degré de latitude nord.

<sup>1</sup> Hertslet, *op. cit.*, II, p. 661.

De l'intersection du thalweg du Mono avec le 7° degré de latitude nord, la frontière rejoindra par ce parallèle le méridien de l'île Bayol, qui servira de limite jusqu'à son intersection avec le parallèle passant à égale distance de Bassila et de Penesoulou. De ce point, elle gagnera la Rivière Kara suivant une ligne équidistante des chemins de Bassila à Bafilo par Kirikri et de Penesoulou à Séméré par Aledjo, et ensuite des chemins de Sudu à Séméré et d'Aledjo à Séméré, de manière à passer à égale distance de Daboni et d'Aledjo ainsi que de Sudu et d'Aledjo. Elle descendra ensuite le thalweg de la Rivière Kara sur une longueur de 5 kilom. et de ce point remontera en ligne droite vers le nord jusqu'au 10° degré de latitude nord, Séméré devant dans tous les cas rester à la France.

De là, la frontière se dirigera directement sur un point situé à égale distance entre Djé et Gandou, laissant Djé à la France et Gandou à l'Allemagne et gagnera le 11° degré de latitude nord en suivant une ligne parallèle à la route de Sansanné-Mango à Pama et distante de celle-ci de 30 kilom. Elle se prolongera ensuite vers l'ouest sur le 11° degré de latitude nord jusqu'à la Volta blanche de manière à laisser en tout cas Pougno à la France et Koun-Djari à l'Allemagne, puis elle rejoindra par le thalweg de cette rivière le 10° degré de latitude nord qu'elle suivra jusqu'à son intersection avec le méridien 3° 52' ouest de Paris (1° 32' ouest de Greenwich).

## STATISTICS

## TABLE I

(a) *Exports and Imports of Upper Senegal and Niger by the Senegal Route, 1908-1914<sup>1</sup>*

—				Exports.	Imports.
				Francs.	Francs.
1908	..	..	..	438,625	2,306,765
1909	..	..	..	3,159,996	2,342,192
1910	..	..	..	5,276,497	7,038,101
1911	..	..	..	3,930,497	17,496,305
1912	..	..	..	3,422,410	9,803,799
1913	..	..	..	3,681,987	10,783,390
1914	..	..	..	2,394,632	5,592,880

<sup>1</sup> *Statistiques du Commerce des Colonies françaises.* Tome i, 1914.

(b) *Total Exports and Imports of Upper Senegal and Niger, 1912 and 1913*<sup>1</sup>

	1912.		1913.	
	Exports.	Imports.	Exports.	Imports.
	Francs.	Francs.	Francs.	Francs.
Senegal route .. .. .	3,422,410	9,803,799	3,828,695 <sup>2</sup>	10,783,390
Guinea route (approximate) ..	500,000	1,500,000	1,277,000	3,500,000
Sahara frontier (approximate)	486,283	817,625	187,000	1,178,000
Frontiers of southern colonies (approximate)	7,737,446	3,502,842	7,594,342 <sup>3</sup>	4,068,993
Total .. .. .	12,146,139	15,624,266	12,887,037	19,530,383

TABLE II

(a) *Quantities, Values, and Destinations of Exports from Upper Senegal and Niger in 1913 by the Senegal Route*

	To France and French Colonies.		To United Kingdom.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Met. tons.	Francs.	Met. tons.	Francs.	Met. tons.	Francs.
Da. .. .. .	5	2,165	..	..	5	2,165
Gold .. .. .	25	75,195	..	..	25	75,195
Ground-nuts .. .. .	8,577	2,058,512	..	..	8,577	2,058,512
Gum .. .. .	632	362,558	..	..	632	362,558
Hides .. .. .	201	296,972	79	117,771	280	414,743
Ivory .. .. .	..	..	..	10,880	..	10,880
Kapok .. .. .	28	13,922	..	..	28	13,922
Rubber .. .. .	83	499,802	..	318	83	500,120
Sesame .. .. .	50	11,034	..	..	50	11,034
Shea butter .. .. .	28	13,783	..	..	28	13,783
Shea nuts .. .. .	475	142,389	..	..	475	142,389
Specimens for collection	..	2,250	..	..	..	2,250
Wax .. .. .	3.6	2,809	0.4	320	4	3,129
Wool .. .. .	201	70,292	..	..	201	70,292
Other goods .. .. .	..	1,015	..	..	..	1,015
Total .. .. .	..	3,552,698	..	129,289	..	3,681,987

<sup>1</sup> *Rapport d'ensemble annuel, 1913.*

<sup>2</sup> The difference between this figure and that given for the exports by the Senegal route in the previous table is due to a difference in the estimate made of the value of the wool export. (See *Rapport d'ensemble annuel, 1913, p. 549.*)

<sup>3</sup> This figure includes 500,000 francs representing the estimated value of the uncontrolled export of gold to Europe and the coast colonies.

(b) *Quantities and Values of Exports from Upper Senegal and Niger in 1913 by the French Guinea Route (approximate figures only)*

—	Quantity.	Value.
	Met. tons.	Francs.
Cotton .. .. .	75	90,000
Gold (Senegambia mines) ..	0·1	300,000
Ground-nuts .. .. .	100	20,000
Hides .. .. .	380	570,000
Rubber .. .. .	30	150,000
Shea nuts .. .. .	156	39,000
Wool .. .. .	108	108,000
Total .. .. .	..	1,277,000

(c) *Quantities and Values of Exports from Upper Senegal and Niger in 1913 by the Colonies of the South Guinea Coast (approximate figures only)*

—	Number.	Value.
		Francs.
Cattle .. .. .	76,875	5,381,250
Sheep .. .. .	71,958	430,848
Horses .. .. .	1,542	308,400
Donkeys .. .. .	2,545	101,800
Camels .. .. .	548	54,800
Other exports .. .. .	..	1,317,244
Total .. .. .	..	7,594,342

The only noteworthy commodity exported in 1913 across the Sahara frontier was millet, the quantity being estimated at 1,250 tons, the value at 187,000 frs.

TABLE III

*Value and Origin of Imports into Upper Senegal and Niger in 1913 by the Senegal Route only*

	Countries of Origin.						Total.
	France and Colonies.	United Kingdom.	Germany.	Holland.	Belgium.	Other Countries.	
Cotton goods (other than guinea cloth)	Francs. 358,618	Francs. 1,135,788	Francs. 3,417	Francs. 128,612	Francs. 17,444	Francs. 159,040	Francs. 1,802,919
Cotton thread	76,650	18,745	..	..	693	93	96,181
Empty sacks	204,303	17,331	..	..	..	39,596	261,230
Guinea cloth	1,213,200	..	..	148,800	204,600	31,200	1,597,800
Machinery	154,005	2,854	..	..	..	2,157	159,016
Paper goods	183,554	70	..	..	439	1,076	185,139
Preserved meat	156,109	250	..	290	..	..	156,649
Spirits	320,474	1,855	..	..	..	2,175	324,504
Sugar	496,989	135	..	..	..	..	497,124
Wines	380,878	562	..	..	..	4,630	386,070
Other merchandise	4,605,299	137,890	63,994	76,084	26,140	407,351	5,316,758
Total	8,150,079	1,315,480	67,411	353,786	249,316	647,318	10,783,390

TABLE IV

*Quantities, Values, and Immediate Destinations of Exports from the Military Territory of the Niger, 1913*

	French Colonies.		British Colonies.		Total.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Cotton ..	..	Francs.	Metric tons.	Francs.	Metric tons.	Francs.
Dates ..	..	..	.45	900	.45	900
Live animals—	..	..	..	1,300	..	1,300
Cattle ..	..	16,375	Number.	442,730	Number.	459,105
Sheep ..	..	1,025	26,000	122,430	26,245	123,455
Horses ..	..	..	560	79,130	560	79,130
Donkeys ..	..	1,110	720	24,640	757	25,750
Camels ..	..	1,000	..	..	8	1,000
Hides ..	..	..	Metric tons.	..	Metric tons.	..
Natron (refined)..	..	..	161	161,000	161	161,000
Ostrich feathers..	..	..	27.8	5,560	27.8	5,560
Millet and rice ..	..	..	.085	8,500	.085	8,500
Salt and raw natron	240	25,745	1,458	103,250	1,698	128,995
Skins (prepared)	..	3,800	..	16,500	67.6	20,300
Other articles ..	..	2,660	86	172,125	86	172,125
Total	..	51,715	..	1,140,065	..	1,191,780

TABLE V

*Imports into the Military Territory of the Niger, 1913*

	Value in francs.
Cattle, horses, sheep, &c. .. .. .	34,740
Chemical products .. .. .	11,357
Cotton goods .. .. .	544,275
Kola nuts .. .. .	131,119
Lead, copper, &c. .. .. .	8,317
Matches .. .. .	4,547
Millet .. .. .	25,050
Ostrich feathers.. .. .	1,030
Paper .. .. .	3,770
Perfumery .. .. .	2,725
Preserved meat and fish .. .. .	11,150
Salt .. .. .	14,530
Skins (prepared).. .. .	9,937
Sugar .. .. .	15,320
Tea .. .. .	2,625
Tobacco .. .. .	4,475
Toys, beads, &c. .. .. .	10,200
Other articles .. .. .	26,730
Total .. .. .	861,897

## AUTHORITIES

### HISTORICAL

(See *French West Africa*, No. 100 of this series, pp. 20, 21.)

### ECONOMIC

#### (a) Official

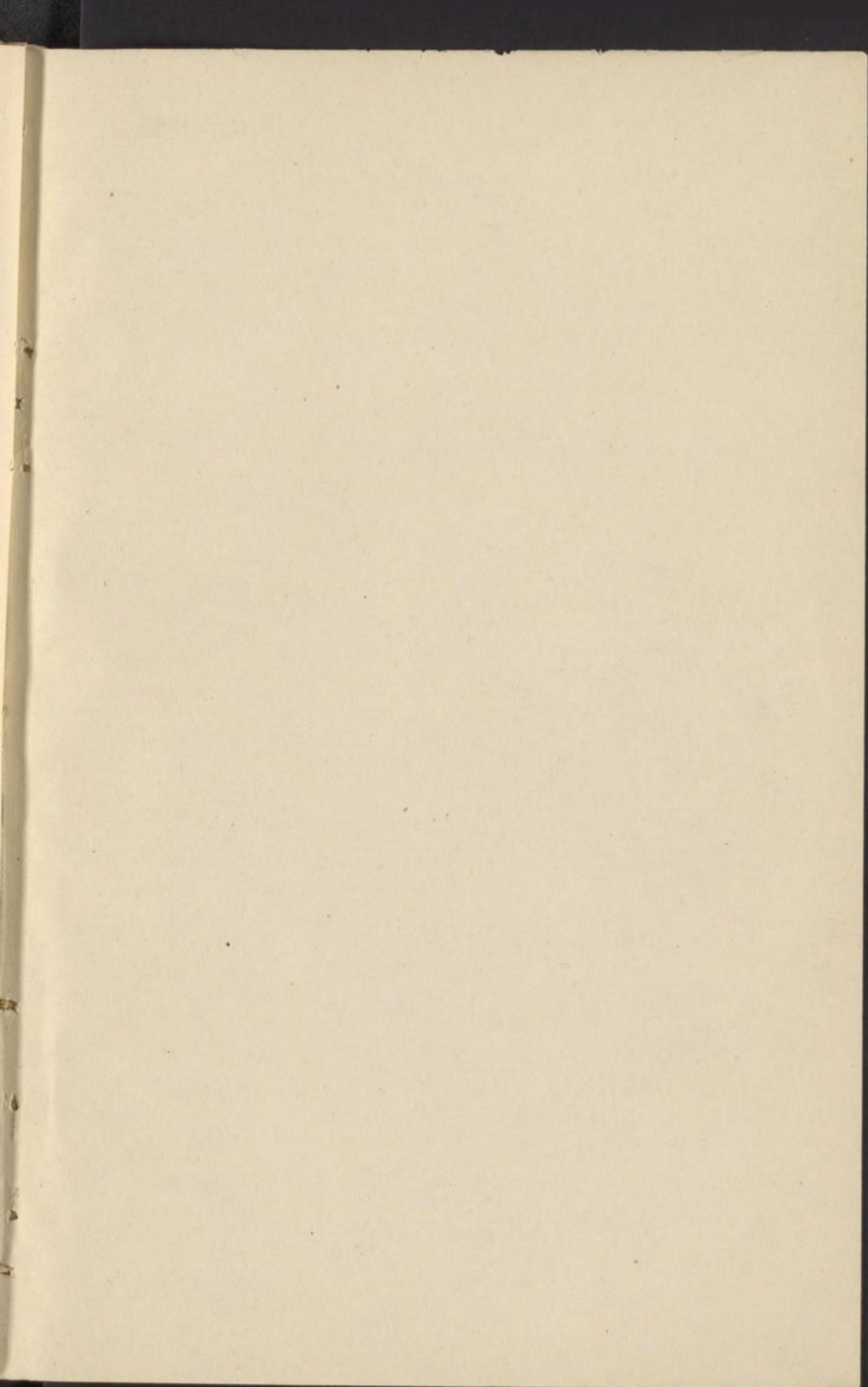
- Annuaire du Gouvernement Général de l'Afrique Occidentale Française*, 1913-1914 and 1915-1916. Paris, 1914, 1916.
- Bulletin de l'Office Colonial*, November 1914, and October-November 1915. Melun, 1914, 1915.
- Haut-Sénégal et Niger* (Office Colonial). Melun, 1914.
- Notice publiée par le Gouvernement Général à l'occasion de l'Exposition Franco-Britannique de Londres.* (Rédigée par G. François.)
- Rapport d'Ensemble Annuel*, 1913 (Gouvernement Général de l'Afrique Occidentale Française). Paris, 1916.
- Statistiques du Commerce des Colonies Françaises*, 1913 and 1914. Paris, 1915, 1916.

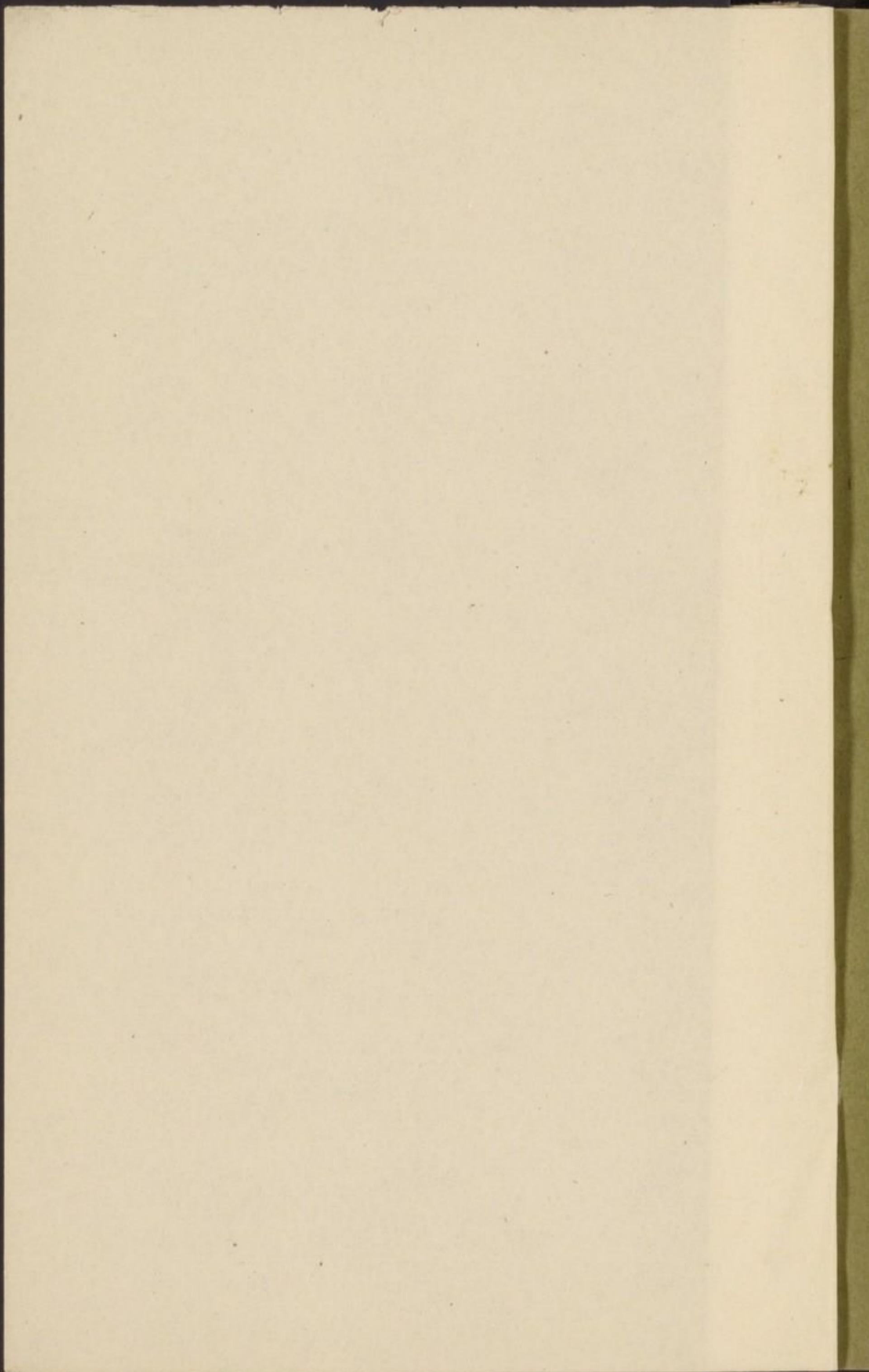
#### (b) General

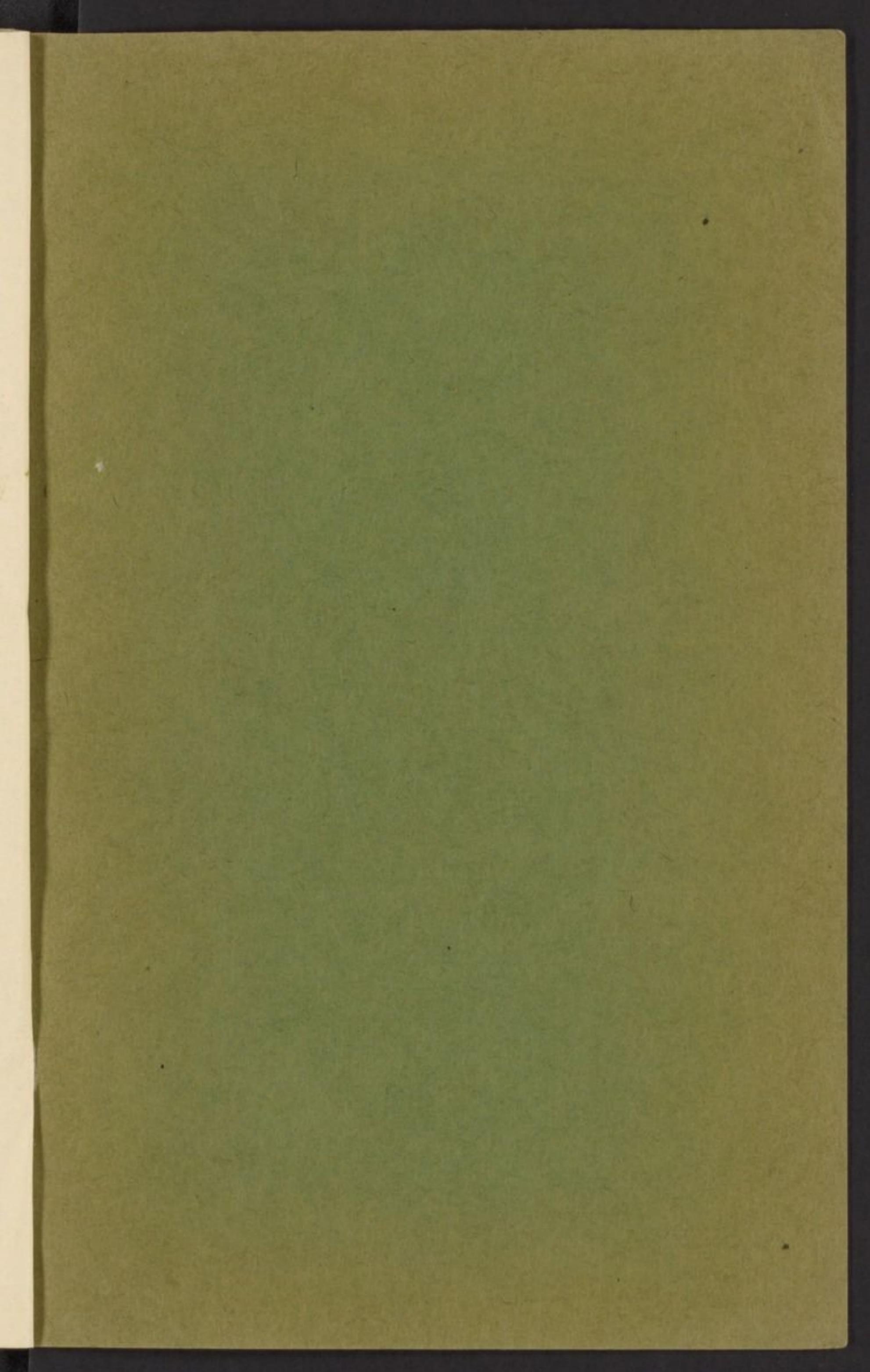
- Annuaire Colonial*, 1915. Paris, 1915.
- The Cultivation, Preparation, and Utilisation of the Ground-Nut* (Bulletin of the Imperial Institute, Vol. VIII, 1910). London, 1910.
- DOUCET, ROBERT. *Le Projet de Chemin de Fer trans-africain.* (Questions Diplomatiques et Coloniales, Vol. XXXIII.) Paris, 1912.
- MENIAUD, JACQUES. *Le Haut-Sénégal-Niger (Géographie Économique).* (Séries d'Études publiées sous la direction de M. le Gouverneur Clozel: Deuxième Série.) Paris, 1912.
- Mitteilungen aus den deutschen Schutzgebieten*, Band 30, Heft 4. Berlin, 1917.
- PAULIN, HONORÉ. *L'Outillage économique des Colonies Françaises.* Paris, 1913.
- PEGARD, PIERRE. *Les Travaux publics en Afrique Occidentale.* (Questions Diplomatiques et Coloniales, Vol. XXXII.) Paris, 1911.
- PETIT, MAXIME. *Les Colonies françaises (Encyclopédie Coloniale).* Paris, 1902.
- Les Ressources agricoles et forestières des colonies françaises.* (Exposition coloniale de Marseille, 1906.) Marseilles, 1907.

## MAPS

Upper Senegal and Niger is shown on the general War Office map, "West Africa" (G.S.G.S. 2434), scale 1:6,336,000, 1903 (additions 1914, boundaries corrected 1919).







**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, S.W. 1;  
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 1s. 6d. Net.*

4.