and 9300 in the Maritime Province; but in 1877 the total export from the former did not exceed in value £1700 to £2000.

The same falling-off is observable in the fisheries,—one species at least, the *Rhytina stelleri,* having completely disappeared within the 19th century. Fishing is still a valuable source of income on the lower courses of the great rivers, especially the Ob, where the yearly earnings amount to about £30,000. The fisheries on Lake Baikal supply cheap food (the *omul*) to the poorer classes of Irkutsk and Transbaikalia. The native populations of the Amur—Golds and Ghilyaks—support themselves chiefly by their fisheries, when the salmon enters in dense masses the Amur and its tributaries.

Though Siberia has within itself all the raw produce necessary for prosperous industries, it continues to import from Russia with­out exception all the manufactured articles it uses. Owing to the distances over which they are carried and the bad organization of trade, all manufactured articles are exceedingly dear, especially in the east. The manufactories of Siberia employ less than 15,000 workmen, and their aggregate production does not exceed £1,600,000 in value; of these 11,500 are employed in Western Siberia, the yearly production being about £1,200,000. Nearly one-third of the total represents wine-spirit, 23 per cent. tanneries, 18 per cent. tallow-melting, and a considerable sum cigarette-making. The villages of Siberia do not carry on a variety of petty trades like the villages in Russia, except in the districts of Tobolsk nearest the Urals, where tanning, boot-making, carpet-making, and the like are prosecuted.

Mining is in the same backward state as manufacturing in­dustry. The chief attention is given to gold-mining. But the use of improved machinery is far from common, and the condition of the workmen wretchedly bad,—insufficient food, bad lodgings, and overwork under the most unsanitary conditions. As the geology of the gold-mining districts is quite unknown, immense sums are sunk in futile search. The amount of gold obtained has much increased since mining was begun in the Nertchinsk district and parts of the Altai (a right formerly reserved for the imperial Government), and since the discovery of auriferous deposits in the basin of the Amur and in the Maritime Province. It reached in 1882 4563 lb in Western Siberia (nearly all in the Altais), and 58,420 lb in Eastern Siberia (about 27,000 in Yakutsk, more than 10,000 in Nertchinsk, and about 8000 in the province of Amur). The Altai mines (12,000 workmen) yielded in 1881 16,670 lb of silver (13,310 in 1882), 13,140 cwts. of lead, 6700 of copper (the last two decreasing items), 3200 of iron, 240,000 of coal, and about 320,000 of salt. Silver-mining is almost entirely abandoned in Nertchinsk, and in 1882 only 1900 lb were extracted.

Trade is in the hands of a few merchants. The chief market is the Nijni-Novgorod fair, where Siberian merchants get twelve or eighteen months’ credit at correspondingly high rates.@@1 Prices on the Amur are not more favourable, since the trade by sea is pre­vented from developing owing to the facility with which great pro­fits are made by the exchange of wine-spirit and sables for whisky. The villages are in a still worse condition, whole populations being dependent for the necessaries of life upon a few merchants. The foreign trade is insignificant, and the hundred merchant ships (thirty English) which visited the port of Vladivostok in 1883 came chiefly for the needs of the garrison. The imports of manufactured wares from Russia amount to an annual value of £12,000,000; the corresponding exports of raw produce are only about £4,000,000, —tallow, hides, furs, and grain being the chief items. There are several great fairs in Siberia, that of Irbit (with an annual turnover of £5,000,000 to £7,000,000) being the most important. Those of Ishim, Tomsk, Irkutsk, and Verkhne-Udinsk deserve mention. In the north and north-east several fairs, where natives gather to pay tribute, to sell furs, and to purchase food and necessaries for hunt­ing, have a local importance.

The main line of communication is the great Moscow road. It starts from Perm on the Kama, and, crossing the Urals, reaches Ekaterinburg—the centre of mining industry—and Tyumen on the Tara, whence steamers ply *via* Tobolsk to Tomsk. A railway has of late been constructed between Perm and Ekaterinburg, touching the chief ironworks of the eastern slope of the middle Urals, and has been continued *via* Kamyshłoff to Tyumen. From Tyumen the Moscow road proceeds to Omsk, Tomsk, Krasnoyarsk, and Irkutsk, sending off from Kołyvañ a branch south to Barnaul in the Altai and to Turkestan. From Irkutsk it proceeds to Trans­baikalia, and Lake Baikal is crossed either by steamer or (when frozen) on sledges, in either case from Listvenitchnaya to Posolskoye. A route was laid out about 1868 round the south shore of Lake Baikal in order to maintain communications with Transbaikalia during the spring and autumn, which were frequently interrupted when the old route from Selenghinsk across the Khamar-daban had to be resorted to. From Posolskoye on Lake Baikal the great road proceeds to Verkhne-udinsk, Tchita, and Sryetensk on the

Shilka, whence steamers ply to the mouth of the Amur and up the Usuri and Sungatcha to Lake Khangka. When the rivers are frozen communication is maintained by sledges on the Amur; but in spring and autumn the only continuous route down the Shilka and the Amur, to its mouth, is on horseback along a mountain path (very difficult across the Bureya range). On the lower Amur and on the Usuri the journey is also difficult even on horseback. On the whole the steamer communication is in an unsatisfactory state, and when the water on the upper Amur is low vessels are sometimes unable to reach the Shilka. The Yenisei is navigated as far as Minusinsk, and communication is maintained along its banks in the summer by boat and horse. The Angara offers great difficulties to navigation on account of its rapids; regular water communication begins only below these and is continued to its mouth. On the Lena, which is an important waterway from Kirensk, merchandise is shipped for the gold-mining companies on the Lena below the Vitim, and sometimes up the lower Vitim. Another route of importance before the conquest of the Amur is that which con­nects Yakutsk with Okhotsk or Ayan. Regular postal communica­tion is maintained by the Russians between Kiachta and Kalgan (close by Peking) across the desert of Gobi. Owing to the relatively good condition of the great highway the journey to Siberia is not so difficult or formidable as is generally supposed. As a rule the Siberians travel freely, and long journeys are undertaken more readily than short railway journeys are in Europe.

Siberia has been colonized in two different ways. On the one hand, the Government sent parties (1) of Cossacks to settle on the frontiers, (2) of peasants who were bound to settle at appointed places and maintain the communications along the routes, (3) of *stryeltsys* to garrison forts, (4) of *yamschiks—*a special organization of Old Russia intrusted with the maintenance of horses for postal com­munication, and finally (5) of convicts. Even so recently as 1856-57 a good deal of the Amur region was peopled in this way. Serfs in the imperial mines were liberated and organized in Cossack regiments (the Transbaikalia Cossacks); some of them were settled on the Amur, forming the Amur and Usuri Cossacks. Other parts of the river were colonized by peasants who emigrated with Government aid, and were bound to settle in villages, about 20 miles apart, on the Amur, at spots designated by officials. As a rule, this kind of colonization has not produced the results that were expected. On the other hand, free colonization has been more successful and has been undertaken on a much larger scale. Soon after the first appearance of the Cossacks of Yermak in Siberia thousands of hunters (*promyshlonyie*)*,* attracted by the furs, im­migrated from north Russia, explored the country, traced the first footpaths, and erected the first houses in the wilderness. Later on serfdom, religious persecutions, and conscription were the chief causes which led the peasants to make their escape to Siberia and build their villages in the most inaccessible forests, in the prairies, and even on Chinese territory. The severe measures of the Government against such “runaways” could not prevent their immigration to Siberia. While governmental colonization studded Siberia with forts, free colonization filled up the intermediate spaces. This free colonization has continued throughout the 19th century, occasionally assuming larger proportions, as in 1848-55. Since the emancipation of the serfs it has been steadily increasing. In spite of the involved formalities which the peasants have to go through before emigrating, and the great expense, whole villages emigrate from Russia to Siberia. During the twenty-five years ending 1879 no fewer than 100,000 persons crossed the Urals; and in 1882 the Ural Railway conveyed 7025 emigrants, while the total number of emigrants to Siberia in the same year was estimated at not less than 40,000.@@2

Siberia is a great penal colony. Exile to Siberia began in the first years of its discovery, and as early as 1658 we find the Non­conformist priest Avvakum@@3 following in chains the exploring party of Pashkoff on the Amur. Raskolniks in the second half of the 17th century, rebel *stryeltsy* under Peter I., courtiers of rank dur­ing the reigns of the empresses, Polish confederates under Catherine II., the “Decembrists” under Nicholas I., nearly 50,000 Poles after the insurrection of 1863, and later on whole generations of socialists were sent to Siberia; while the number of common-law convicts and exiles transported thither has steadily increased since the end of the 18th century. No exact statistics of Siberian exile were kept before 1823. But it is known that in the first years of the 19th century nearly 2000 persons were transported every year to Siberia. This figure had reached an average of 18,250 in 1873-77 and rose above 20,000 in 1882. Between 1823 and 1877 the total was 393,914,@@4 to which ought to be added the families of many exiles, making more than 600,000 men, women, and children transported since the beginning of the 19th century. Of 151,584 transported during the ten years 1867-76 18,582 were

@@@1 Salt in the Altai region (where it is obtained) is retailed at 2 roubles 40 co­pecks the *pud* (4s. 10d. for 32 lb); sugar, which is sold at 7 to 8 roubles the *pud* in Western Siberia (14s. to 16s. the 32 lb), reaches 12 to 20 roubles in Transbai­kalia, and occasionally 40 roubles at Yakutsk.

@@@2 Yadrintseff, *Siberia as a Colony* ; Levitoff, *Guide to West Siberia* (Russian); *Russkaya Mysl,* July 1882.

@@@3 The autobiography of the protopope Avvakum is one of the most popular books with Russian Nonconformists.

@@@4 The Poles are not reckoned in the above figures.