

pegs thrust into the ground, and a huge stone is often placed on the pipe to keep it firm. After the iron has been heated white hot in the charcoal, it is taken out by the iron pincers and beaten on a stone anvil. The Chaga smiths not only make spear-blades and knives of apparently tempered steel, but can fabricate the finest and most delicate chains.

THE INDUSTRIES OF SIBERIA.¹

IN the region of the Amoor, the industries are of very small extent, chiefly on account of lack of means of transportation. The only possible communication at present is upon the rivers, and is completely closed during a great part of the year, when the rivers are impassable for both boats and sledges. This is unfortunate, for on the borders of this immense territory lie important industrial interests.

At the sources of the tributaries of the Amoor are gold mines; Kamchatka and the neighboring islands produce valuable furs; the island of Saghalin has rich and excellent coal deposits. Moreover, in the southern part, in the so-called Usuri region, are rich timber-lands and some land even capable of cultivation. The pursuit of these industries, with the fisheries and coal-mines, would make this Usuri region a valuable source of revenue; at present, however, they are very slightly developed, and that mostly by Americans and Chinese, rather than by Russians. The latter, however, are making strenuous exertions to colonize the territory, and thus avail themselves of its resources.

The industries of the two western provinces, Tobolsk and Tomsk, are somewhat farther advanced; these two provinces contain over 80 per cent of all the manufactories of Siberia. According to the official reports there are 2,300 of these, of which 1,460 are in Tobolsk and 660 in Tomsk. In all 12,500 hands are employed, and 14,000,000 roubles value produced annually. The most important class of manufactures is that which uses raw animal materials,—dyeing and tallow rendering establishments, etc. The class next in importance includes the distilleries, breweries and flour-mills. Besides these there are numerous soap, candle and glue factories, carriage factories, rope walks, felt-boot making establishments, etc. These latter can scarcely be called factories, but are rather of the nature of small work-shops. Except the mines and the smelting works closely connected with them, there is very little manufacture of mineral products in Siberia. There is one exception in the case of considerable glass works, which produce 200,000 roubles worth annu-

ally. There are also small potteries and brick kilns. The only textile manufacturing worthy of notice is done at a single establishment in Tjumen, which produces annually 200,000 roubles worth of army cloth. The needs of the people in this line are almost entirely supplied by household manufactures. Many knit and woven woollen articles prepared in this way find a market even in European Russia.

In all the Siberian manufactures, there is almost no national division of labor or management of capital. The same person is often both capitalist and laborer, and the production of the raw materials goes hand in hand with the manufactures. The manufactories are distributed here and there about the country, where the raw material is to be had to the best advantage, for transportation is difficult and costly.

Many products, even those which have a wide demand, produce a bad impression on account of their clumsiness and tasteless execution. The low standard of living and education among the peasants, who are the principal customers, is the main cause of this. For instance, in a town of Tobolsk are produced coarse, clumsy muskets with flint locks, which, nevertheless, find a ready sale at a good price, even as far as East Siberia and Amoor.

In general, however, manufacturing has taken many steps in advance in Siberia within the last fifteen years. In many places machinery has taken the place of hand labor, better processes in tanning, dyeing, etc., have been introduced, and a general improvement is noticeable in the quality of all the productions. With better means of transportation and an infusion of European enterprise, Siberia will yet contribute an important share to the resources of the world.

— According to the Indian papers Dr. Aitchison has made an extensive botanical collection in Badghis and Khorassan, in Persia, and when last heard of was at Turbat, on the Perso-Afghan frontier. He is said to be very anxious to transfer his collections, which number 600 species, to Kew. His researches have been directed, not merely to the collection of plants, but to ascertaining the uses to which they are put locally.

— The rapidity with which stalactites are formed under favorable condition is well shown in St. John's Gate, Quebec. This old gate in the walls of the city was rebuilt in 1867 of a greyish limestone, and the constant dripping of water from the crevices has made deposits of rather dirty limey matter. In many cases regular stalactites have been formed, some reaching a length of a foot and a half, and being at least three-quarters of an inch in diameter at the base.

¹Condensed from an article in the *Oesterreichische monatschrift für den Orient*.