

by Alice Turner, and illustrated by W. L. Metcalf, relating the adventures of two old ladies who have come into a fortune and go to Boston to spend it, and "Susanna," a sketch of old times on the eastern shore of Maryland, by Nannie A. Cox, with pictures by Castaigne.

We have received from the Government Printing Office, Washington, a book of 700 pages, entitled "Wool and Manufactures of Wool," compiled by Worthington C. Ford, chief of the Bureau of Statistics. In the introduction are given many interesting facts relating to the condition of the sheep and wool-raising industry in various parts of the world. "The conditions of the wool supply," says the author, "have changed even more radically (in the period between 1860 and 1893) than the product. Europe has yielded to the southern hemisphere the growth of fine wools. . . . Careful husbandry is supplanting nomadic territory conditions. While the total American clip has increased three-fold in thirty years, the clip of Australia, under management most intelligent and scientific, has increased tenfold in the same period." The copious appendix is devoted chiefly to facts and statistics concerning the sheep, wool clip and woolen manufactures of the United States. There are tabulated returns also of the imports of woolen goods into Canada and other chief countries.

COTTON IN JAPAN.

T. Ourakami, a correspondent of the *Economist Français*, writing from Tokio, says that from the year 1857 or 1858, that is to say, a little before the opening of Japan to foreign trade, the natives knew that an ingenious system of cotton-spinning was in existence in Europe, and they were anxious to see it introduced into their own country. In 1875, after the return from a visit which Count Matsukata, Minister of Finance, had paid to Europe, the Japanese Government purchased through him several small model machines for spinning cotton, and caused them to be distributed in those departments in which cotton is cultivated, in order that the inhabitants might become acquainted, not only with the machine itself, but with its uses. This was the commencement of the Japanese spinning industry, an industry which has since then experienced considerable development.

At the commencement of the industry the Japanese were only able to produce coarse yarns, those of No. 16, which were only suitable for replacing the ones hitherto produced in the primitive manner of the country, that is to say, by the distaff. From 1880 to 1884 cotton spinning became quite an important and flourishing industry in Japan. At the latter date there were 27 spinning companies throughout the country, producing about 617,000 Japanese pounds of yarn. The progress made was even more rapid during the period comprised between the years 1885 and 1889, as from the official statistics issued by the Japanese Government it appears that while in 1886 the amount of yarn produced amounted to 778,483 Japanese pounds, this quantity had increased in 1888 to 1,593,103 lbs., and in 1890 to 5,132,588 lbs. The number of spindles were respectively 65,420, 113,456, and 277,895. In 1890 there were 30 spinneries established in the country. The great development which had been effected in this industry in the years quoted above may be attributed entirely to the following causes:—At this period the demand for money was not so great, and capitalists experienced some difficulty in finding good investments. They looked favorably upon industrial enterprises, particularly upon the cotton spinning industry, which realized profits varying between 20 and 30 per cent. annually. Soon cotton spinneries sprung up one after the other to such an extent that the production of yarn in 1890, as compared with 1886, was quadrupled. The carding companies then passed through an acute crisis, for the production of yarns of the higher numbers having so greatly increased, it was difficult to find an outlet for the goods, and the surplus stock occasioned considerable embarrassment to the manufacturers. Among the manufacturers there were very few turning out fine yarns, those, for example, above No. 20, and the import of foreign yarns of this description continually increased. For example, the value of such imports in 1877 amounted to four million yen, while in 1888 they exceeded thirteen million (the par value of the yen is 4s. 2d.)

It will thus be understood that the progressive increase in the imports of foreign yarns on the one hand, and the check experienced in the production of Japanese yarns on the other, were due principally to an imperfect knowledge of this industrial art on the part of the Japanese. The manufacturers being desirous of acquainting themselves with the situation of the cotton industry abroad, sent out to Bombay two agents, who were commissioned to study the condition of the carding industry of India, and to bring back detailed information upon this subject. Soon afterwards a report was received from these agents to the effect that, judging from the condition of the Indian markets, it might be safely predicted that the cotton spinning industry of Japan had a brilliant future before it. In course of time it would, in their opinion, certainly have the monopoly of the Japanese markets, as it will soon be impossible for Bombay yarns to compete with the Japanese. The manufacturers being thus encouraged, commenced to study methods of turning out yarns of the finer descriptions, which are largely consumed in the country, and more perfected machinery was employed in order that a keen competition might be carried on with the foreign yarns. The result was very soon seen in an increased national production and a decreased importation. For example, in 1888 the quantity produced, in Japanese pounds, amounted to 957,000, and the imports in English pounds to 47 millions. In 1890 the quantity produced amounted to 32 million pounds, and the imports to 31 millions. In 1892 the figures were respectively 64 and 24 millions.

Thus, as it will be seen by the above, the imports of foreign yarns have fallen off year by year, and they decreased in value from 13 millions of yen in 1887 to seven millions in 1892. This is a result of the progress that has been effected in the national industry, and the great part of this success comes naturally from the skill of the workmen, who have learned much from their foreign competitors.

UNITED STATES PATENTS.

The following list of patents granted by the United States Patent Office for inventions relative to textiles and textile machinery is reported for THE CANADIAN JOURNAL OF FABRICS by Glascock & Co., patent attorneys, Washington, D C., of whom printed copies can be obtained for 25 cents each.

PATENTS GRANTED JUNE 19, 1894.

E. Murby, St. Louis, Mo., machine for making looped fabric.
E. G. Johanson, Rockford, Ill., loom.
G. W. Stafford, Providence, R.I., loom shuttle-box operating mechanism. Two patents.
P. P. Craven, Manchester, England, ring spinning frame.

PATENTS GRANTED JUNE 26, 1894.

H. A. Houseman, Philadelphia, Pa., knitting machine needle, actuating cam.
C. B. Sander, Chemnitz, Germany, warp knitting machine.
J. H. Lorimer, Philadelphia, Pa., textile machinery apron.
F. N. Turney, Nottingham, England, apparatus for extracting oil from wood.
D. H. Rice, Brookline, Mass., wool-washing machine. Two patents.
F. G. Sargent, Graniteville, Mass., wool-washing machine.

EXPIRED JUNE 19, 1894.

J. Sladdin, machine for making loom harness.
Whittemore & Green, top roll for spinning machinery.
S. George, spinning mule.

PATENTS GRANTED JULY 3RD, 1894.

J. P. Odgers, Philadelphia, Pa., card frame or mount.
H. S. and T. H. Greene, Lowell, Mass., cloth napping machine.
E. Schweinefleisch, Milhausen, Germany, cloth napping machine.
H. A. Houseman, Philadelphia, Pa., circular knitting machine.
W. G. Connell, Philadelphia, Pa., loom.
W. G. Connell, Philadelphia, Pa., woven fabrics.