

valued at £120, and the length of the thread is about two hundred and twenty-six miles. One pound of this thread is more valuable than two pounds of gold.

Before Britain became so great a commercial nation, each town and village had its weaver, and every good housewife was expected to furnish her family with linen of her own spinning.

The Russian factories produce annually goods valued at over four millions sterling, which are made entirely from flax fibre. Much linen and thread is made annually by the peasantry at their homes, the value of which cannot be obtained.

Flax used to be extensively grown in Ireland, but the acreage under this crop has greatly decreased in the last few years, and we are chiefly dependent upon foreign supplies. We use up about two hundred million pounds, and the approximate value of the linens made in the United Kingdom is ten millions sterling. In France the quantity produced is greater. Hemp is more generally used for bagging and ropes than for clothing, since sackcloth is seldom indulged in.

What is termed in commerce "Manilla hemp" is in fact a plantain fibre, our imports of which have trebled in the last quarter of a century, and are valued at two and a half millions sterling. Although chiefly used here as rope, dress fabrics are made of it in the Philippines.

Another fibre which has been much vaunted, but has never come extensively into use, is the nettle fibre, species of *Urtica* or *Bosheria*. The French have adopted the Malay name of "Ramie," but in India it is termed "Rhea." There are probably two species, *Urtica nivea* of China, and *U. candicans* of Java. This first furnishes the strong and beautiful fibre woven into a fabric which has been inappropriately called "grass cloth." The bark is, in the East, softened by hot water or steam, and then separated into its tender fibres. The best is obtained from the young shoots; it is glossy, tough and lasting, combining, to some extent, the appearance of silk with the strength of flax. For more than eighty years experiments have been carried on with machines for decorticating the fibre, but unsuccessfully; hence the difficulty of removing the bark and preparing the fibre has kept it from coming extensively into use. It is, however, largely grown in Mexico, the United States, France, Queensland and other countries.

Passing now to a consideration of the animal fibres used for clothing, the first is the wool of the sheep. There are nearly 500 million sheep in the world, and these produce yearly about 2,000 million tons of wool. A heavier improved fleece is now obtained in our Australasian colonies, averaging about six pounds of greasy wool per sheep. It is curious to notice that the British possessions supply the bulk of the wool produced, and we are becoming less and less dependent upon Europe. Although colonial wool has declined in price about one-half per bale in the last 30 years, yet the quantity produced has enormously increased, having quadrupled in that period, and the average annual value

of the sales here has increased from £7,000,000 to £26,000,000 yearly. Our imports of wool are steadily increasing, for the greater part of the world's clip comes under the hammer at the London periodical wool sales. Last year our imports reached 737,600 million pounds of sheep and lamb's wool, but to this has to be added the imports of alpaca and goat's wool, woollen rags (to be worked up again), sheepskins and the production of wool at home, bringing up the total to 978,600 million pounds. We exported 430,000 million pounds. The value of the imports of these wools last year was 28,610 million pounds sterling. The 418 millions of population of Europe and North America consume 2,225 million pounds of raw wool, or in the proportion of nearly three pounds of clean wool per inhabitant.

Wool as an article of clothing is becoming more generally used than formerly, and even the teeming populations of China, Japan, and South America, are beginning more to appreciate wool as a clothing material.

Goat's wool, or mohair, and alpaca, are elements to be considered in the woollen manufacture. Formerly we used to get our fine goat's wool only from Turkey, but now our colonies produce it, and we receive in all 19½ million pounds. The export from the Cape only dates from about 1868, when it amounted to but 102,570 lbs.; now the shipments reach 10,000,000 lbs.

European competition has proved very disastrous to the fine fabrics which were once made up in Asia Minor from Angora yarn. This industry, which is said to have once employed 1,200 looms, turning out 20,000 pieces of stuff annually, besides gloves and stockings, and a material which was waterproof, and used as cloaks by the wealthier people, has about entirely disappeared, and we get our chief supply of mohair from the Cape and Australia.

The hair of the Angora goat was woven into cloth by the ancient Persians. These garments were dyed in brilliant colors with khenno or cochineal, and robes of such extreme beauty and splendor made from them that they were worn by the kings of Persia. The hangings of the Jewish Tabernacle consisted of a fabric made of goat's hair.

In the district of Orenburg, Russia, a great trade is carried on in shawls and neck wrappers. These are made of gossamer-like webs of goat's hair woven. They are marvellously light, a very large shawl weighing only a few ounces. Many of them are so delicately made that they can be passed through a finger-ring. Real cashmere shawls are made from the down or under fleece of the Thibet goat. In the time of the Great Mogul Emperors, 40,000 looms was the reputed number in Thibet; each loom averaged five shawls annually. The present number of cashmere looms is stated to be about 16,000, and the annual manufacture, 80,000 shawls.

The first shipment of alpaca wool from Islay and Arica was about fifty-seven hundredweight in 1834, but in 1849 one million pounds were sent to England, and now the United Kingdom receives four and three-