

What Kind of Wool is Best for Oregon Growers to Produce.

BY JOHN MINTO.

According to Mr. Hayes, our importations of dress-goods—composed principally of combing-wool—were, for

1869—63,278,264 yards, of declared value of \$15,000,000
1870—67,490,196 yards, of declared value of \$16,552,000

Our importations for cloths, for corresponding period, were, for

1869—Of a declared value of \$7,000,000
1870—Of a declared value of \$5,545,011

This indicates that we are now perhaps importing nearly twice as much in value of combing-wool fabrics, as we are of those of clothing wools, but it gives no indication as to what amount of the former class of raw wool is imported, but it must be now near or quite as large, as the value of the imported goods which American combing-wool manufacturers are paying to foreign wool growers for the wool they need, and are doing all they can to encourage the production in their own country, as the extracts from the *Bulletin* will show:

It will be interesting to agricultural readers to know the individual views of some of the leaders in this department of the woolen industry, and we append some extracts from remarks made at one of the social reunions of the Manufacturers' Association, not only to show the importance attributed by these practical men to growth of combing wools, but to show how prudently, while dwelling upon this point, they deprecate the abandonment of other branches of wool production.

Mr. E. B. Bigelow, the first President of the Manufacturers' Association, and who, more than any other, is entitled to the honor of the conception of the policy which has so happily united the wool growers and wool manufacturers, remarked as follows:

The combing wool industry, and the coarse and fine grades of the card wool industry, have been alluded to, and a question arises as to their relative importance at the present time. It is well known that the card wool industry constitutes by far the larger part, probably four-fifths of the whole; and of that the extreme fine grade forms only a small percentage. The combing wool industry, as has been stated, has recently assumed considerable importance. The principal hindrance to the further rapid extension of this branch of manufacture is the limited supply of raw material. Clothing wools, or card wools, as they are sometimes called, are produced in superabundance the world over, while there is a deficiency of long combing wools. There is nothing that would give such an impetus to the manufacture of worsted fabrics in this country as a full supply of home-grown long combing wool. Could our farmers—especially on the Atlantic slope, near large towns, where their mutton would find ready sale—be induced to engage more extensively in the production of such wools, I am sure they would find it a source of immediate and permanent profit. It would also be a national benefit, not only by furnishing the raw material for an important branch of manufacture, but by supplying a much needed article of food. It is the growing of the long combing wool and its manufacture which have contributed so largely to the prosperity of England. The thirty millions of sheep which she supports are mainly such as produce this description of wool.

The value of the worsted manufacture in England, in 1857, was £18,000,000 (or \$90,000,000). Since that time it has largely increased. In 1864, besides supplying the wants of the people, she exported fabrics to the value of £16,000,000 (or \$80,000,000). In the town of Bradford alone, the worsted manufacture increased in value from £8,000,000 in 1863, to £13,000,000 in 1865. To France, as well as to England, the worsted manufacture is an important source of wealth. During my recent visit to Roubaix, I saw evidences of material prosperity, such as I had rarely seen before. Its population, then 70,000, had doubled during the preceding ten years—43,000 of them being employed directly or indirectly in the manufacture of worsted stuffs.

I have stated that the clothing wools are produced in superabundance. I ought to have excepted the very fine wools, the production of which is rather decreasing than increasing in all wool growing countries. One reason for this decrease is that it is less profitable to raise than the coarser grades; another is that the fashions and the times have changed. Instead of fine wool fabrics many people now wear coarse wool fabrics. Improvements in the processes of manufacture have enabled manufacturers to make from the coarser fibre certain fabrics which

are as satisfactory to the consumer as the finer wool fabrics of former days. It is desirable that we should have a home supply of all the varieties and grades of wool required by our manufacturers, and I hope that in view of the growing demand and deficient supply of long combing wool, it will make special effort to extend that branch of sheep-husbandry.

Mr. Mudge, late commissioner, &c., said:

I can only say to the wool growers and agriculturists of this country that there is a field more vast than their imagination can take in, in the expansion of the worsted industry. It is the great branch which has engaged the attention of the two greatest nations of Europe, France and England, during the last ten years. Great extension of their manufacturing industry has been in this branch of manufacture.

I believe the agriculturists of our country should pay, not entire attention, but more attention to the growth of long and lustre wools. There is a large amount of these wools now required for the use of the worsted machinery of this country, and we shall extend our manufactures in this branch, provided both wools and worsteds continue under the fostering care of the Government.

Mr. J. Wiley Edmonds, the present President of the Manufacturers' Association, said:

The interests of wool growers being intimately connected with ours, they are subject to all that befalls us as manufacturers. One difficulty we meet with is from the fickleness of the demand for goods from changes of fashion, and the different requirements of our customers as to the styles and characters of goods to be furnished to them. We have to meet the demand, and the changes required of us we must require of the wool growers.

It is true that it is but a few years since we called on the wool growers to furnish us the finest wools, because then the products from fine wools were in demand by our customers; but now all this has changed from the changes of fashion, and the present demand is largely for the coarser wool—for the staple that makes the Scotch tweed and other cloths that predominate in the fashions of the day. The fickleness of the demand is illustrated in my experience as a manufacturer of dress goods. It has been, until very recently, our aim to bring out our delaine fabrics so that they should be soft to handle, and in finish to imitate the all-wool French merinos. Now, as the fashion is, many styles of these goods must be made as stiff and hard as possible. We have to accommodate our fabrics to the changeable taste of the ladies, and the consequence is we now require a large supply of the long, hard, combing-wools. At the present time it is the long combing wools that we want, and shall continue to want, for our worsted goods. Coarse wools are in demand, too, for cloths for men's wear, but I doubt not that we shall very soon find the clothing wool manufacturers calling for fine wool. Then the farmer will find encouragement to produce the best wools, but at present there is a surplus of fine wools grown in the world, and they command a low price compared with the coarser staple. I venture to say that it will not be three years before we shall find the fine wools of the country in demand again. At present, long combing wools are in request, because the worsted goods have lately introduced and they are now the most remunerative of our fabrics. The combing wools of this country are on the increase, and we are now beginning to receive them from Kentucky, and from Missouri and Oregon; and I doubt not that, with the present stimulus, their production will be abundant in a very few years.

It will be noticed here that Mr. Edmonds speaks in the above extract of coarse wool being in demand, too, for men's wear. This coarse wool is placed by Mr. Hayes as third, in point of importance, and as such, I should hardly deem it worth the attention of Oregon wool growers but for the characteristics of the breed of sheep which produces it. Mr. Hayes says of this third class:

There is another class of wools occupying a position between combing and clothing wools, or adapted to special fabrics both of worsted and card cloth, which in view of the developments of sheep husbandry and wool manufacture in this country deserves more attention than it has yet received. These are the wools of the Cheviot sheep, so extensively bred in Scotland in place of the old Highland breed, and which supply the chief revenue of the vast estates of the noble families of Breadalbane, Argyll, Athol, and Sutherland.

The name of this race is derived from the mountains of Cheviot, in the county of Northumberland, England,

extending into the county of Roxburgh, Scotland. The geological basis of this range is porphyritic, the beautiful conical mountains, mostly covered with grasses, ferns, wild thyme, and other plants distinctive of trap-pian soil, rising to a height of two thousand to two thousand five hundred feet; beyond and in contact with them is the rugged country of the heath, the true habitat of the blackfaced or Highland sheep.

Before the middle of the eighteenth century the Cheviot sheep were confined to this district. A little less than a hundred years ago attention was given to their amelioration, and the new Leicester blood was introduced. The infusion of this blood was the more efficacious, as there is much reason for regarding the Leicesters and Cheviots as belonging to the same type, the Leicester type, as it existed before its amelioration by Bakewell, prevailing in all the countries washed by the North Sea. These sheep moreover resemble the Leicesters in general appearance, being without horns and having white faces and legs.

The race is now diffused in all parts of Scotland, except the rugged heath-covered districts, where the Highland race alone can find sustenance. The number in 1856 was estimated by Mr. Stewart, in a monogram of the race published in the French language, at 3,700,000. In the more southerly counties the sheep farms are commonly about 2,000 acres in extent. In general only a small part of the farm is cultivated, rarely more than 50 to 100 acres, and that only for winter food for the sheep. About 12 acres suffice for one sheep, a farm of 1,800 acres sustaining about 1,000 sheep. The artificial food is altogether subsidiary to the natural herbage of the farm. It is supplied during falls of snow, and consists of cultivated grasses or the produce of the swamps, and the natural perennial grasses. These sheep have the faculty of obtaining their food, even when the ground is covered with snow, by scraping away the snow with their feet, and they prefer the natural food, thus obtained, to dry provender. Protected by their close fleece, which prevents the penetration of rain and snow, they bear with comparative impunity the storms of the Scottish hills. They need shelter only from the driving snow storms, which are often of terrible severity, the most common shelter being a circular wall, without covering, of six feet in height, with a simple aperture for admission of the animals. Their limbs are of the length to fit them for travelling and enable them to pass over bogs and snows which a shorter legged animal could not penetrate. Mr. Lewie says the entire management of these sheep in the northern part of Britain has no parallel in the same latitudes in Europe. In no other country similarly situated are sheep so entirely exposed to the inclemency of the weather without shelter of pens or houses. "Were these sheep," he says, "managed as in other parts of the continent of Europe, penned and fed in houses, and prevented from taking natural food, the mountains of the country could not maintain one-fourth part of the present numbers."

The Cheviots, although bred in purely pastoral regions, are grown primarily for mutton. The breeder in the mountains, however, rarely fattens his sheep or lambs for market. They are turned over, at different ages in different districts, to be fattened by the farmer of the arable lands and lower and richer pastures. When fattened, their mutton is held in the highest estimation. In the more southerly counties the increase of a flock of a thousand head is sold as lambs. The selling of the lambs takes place in August, and reaches from 450 to 550, of which three-quarters are male lambs, and the rest young ewes; with 130 to 150 old ewes. These sales, with the washed fleece, make the whole return of the flock. In the north of Scotland the lambs are kept till three years old, and are then sold to be fattened.

The Cheviot sheep-blood amalgamates readily with that of the Leicesters, and a system of breeding has been extensively introduced for producing the first cross of the descent. The rams employed are the pure Leicester breed, and the progeny is superior in size, weight of wool, and tendency to fatten to the native Cheviot. The lambs of this descent are sometimes fed until they are shearlings, when they can be rendered as fat as the parent Leicesters, and not much inferior in weight; and they can also be raised to maturity under less favorable conditions of soil and herbage. The benefit, however, is said to end with the first cross. Mr. Lewie says that there cannot be a question that for general cultivation, in the high and tempestuous countries to which the Cheviot breed is adapted, the race should be preserved in its native purity. Every mixture of strange blood has been found to lessen the character of hardness, which is the distinguishing character of the race. The beautiful breed of the South

Downs would seem to be of all others that which is best adapted to improve the Cheviot; and yet the experiments which have been hitherto made, have shown that the mixed progeny is inferior to the native Cheviot in its adaptation to a country of cold and humid mountains.

We have yet to speak of the new claims of this race to the attention of sheep breeders, resulting from the new demands of manufacture, and the fields recently opened to sheep husbandry.

The washed wool of the Cheviot sheep averages about three and a half pounds to each animal. It was formerly used wholly as a clothing-wool. Since the attention of breeders has been devoted to the fattening properties of the race, the wool has increased in length and diminished in fineness. More lately, and until quite recently, it has been principally used for combing purposes. It is finer than the Cotswold wool, and can be advantageously mixed with English combing wool. The recent application of the Cheviot wool, or a mixture of it, with fine merino wools to certain cloths by the Scotch woollen manufacturers has led to the modern fashion of wearing coarse clothes for business and morning costumes. The basis of the Scotch cassimeres, tweeds, and cheviots is the coarse Cheviot wool spun with a mixture of fine Buenos Ayres wool. The fabrics from this material are liked for hot climates, and have become a demand upon the continent. Even the manufacturers of Elbeuf, in France, so celebrated for their production of fine cloth, have been compelled to import the Cheviot wools, although the complain bitterly of the scarcity and high price. In view of these facts, it can scarcely be doubted that the demand for coarse wools for clothing purposes will be likely to continue, and for the production of such wools no race appears so well fitted as the Cheviot.

The new fields for sheep husbandry, to which public attention has been recently called, comprising the vast natural pastures between the Missouri River and the Pacific coast, the valleys and plains bordering upon the great Sierra Nevada, where the dried grasses, becoming perfectly cured uncut hay, furnish perpetual resources for winter grazing, and offer inducements for the trial of the Cheviot race. If mutton production is to be attempted in this region, the Cheviot race is worthy of the first attention on account of its hardness and working qualities. If the cost of transporting live sheep by railroad from the base of the mountains to the Chicago market—as given by Latham, 75 cents per animal—is not underestimated, the Scotch system of breeding upon the mountains for fattening upon the richer lands of the prairies might be profitably pursued.

Now, Mr. Editor, I do not think the production of this third class of wool is entitled so much to the consideration of Oregon growers as is the breed of sheep which produces it. A race of sheep that can support themselves under such conditions as here described, certainly deserves the attention of those who intend to pursue sheep husbandry in any part of the Columbia valley, and I fancy would prove of great value on the rough and broken ranges that are yet to be occupied on the mountains on either side of the Willamette valley. I do not deem the experiment of improving the breed with a cross of the South Down as at all conclusive as against a possible success with other breeds, the merinos for instance.

How to Preserve Fence Posts.

A correspondent of the *Western Rural* says: "Take boiled linseed oil and stir in pulverized charcoal to the consistency of paint. Put a coat of this over the timber, and there is not a man who will live long enough to see it rotten. I discovered many years ago that wood could be made to last longer than iron in the ground, but thought the process so simple and inexpensive that it was not worth while to make any stir about it. I would as soon have poplar, basswood, or quaking ash as any other kind of timber for fence posts. I have taken out basswood posts after having been set seven years, that were as sound when taken up as when first put into the ground. Time and weather seem to have no effect on them. The posts can be prepared for less than two cents apiece." We believe that this is a good recipe; but one important omission is made, namely, that the posts should be well seasoned before the oil and charcoal are applied.

Fall Ploughing.

A correspondent asks if we would recommend fall ploughing when it is wet—say the present month. In response, we say it is always preferable to plough land when it is dry, whether in fall or spring. When land is in a condition which is known as "greasy" among farmers, it ought not, in our opinion, to be ploughed in spring; but we have often ploughed land in the fall when water followed in the furrow. It scarcely injures it to do this in localities where it is likely to freeze up solid, or to freeze and thaw repeatedly during the winter. If such land is subsoiled at the same time all the better.

Time is everything in spring. Every moment that can be gained by fall ploughing should be. Most of our sowed spring grain crops are seeded too late when the farmer fails to prepare the ground for the seed until spring. The earlier wheat, oats, rye, and peas are sowed in spring the better the crop, other things being equal. With barley it is not so essential. Some of the best crops of barley we ever grew were seeded on land ploughed in the spring after the soil—an undrained stiff loam, with clay subsoil—had got in condition to plough. But even for barley we prefer fall-ploughed land, and then if it is to be seeded later, go over it with a two-horse cultivator and stir the surface thoroughly just before seeding.—*N. Y. World.*

THE *Financier* prints a tabular statement of miles of road controlled by the Pennsylvania Railroad Company, either by lease or by ownership of a majority of the stock. The list embraces sixty-three railroads, including those now being constructed. These are all made tributary to the main line from Philadelphia to Pittsburg, and their termini are distributed in nearly every State in the Union. Including the Union, Central, and Union Pacifics, the total extent of lines will be nearly 15,000 miles, and the grand aggregate of capital invested in them will be at least \$670,000,000. Besides these, there are 250 miles of canals and a line of four steamships now building to run between Philadelphia and Liverpool. The total capital invested in these means of transportation, controlled by one organization, will scarcely fall short of \$750,000,000. It will thus be seen that nearly one-third of the railroads of the United States are under the control of a few individuals in one corporation. In view of the vast political power which could be wielded by a combination of the major portion of the railroad interest of the United States this is a significant fact. In a commercial point of view, it is also worthy of note that all the transcontinental roads will be controlled in Philadelphia.—*Prairie Farmer.*

NO FENCES.—"Fences," says the *Kern County Courier*, "are a peculiar American institution, the result of thriftlessness and inattention to economy. When they are erected and understood to be for no other purpose to enclose and restrain cattle—not to exclude them, a great advance will have been made in civilization. A narrow path serves to divide farms in France, Germany and Holland. Illinois is said to have more fencing than all the German speaking countries of Europe, and a single county, in the State of New York, more than than all France. To an eye unaccustomed to them, they are unsightly, and mar the finest landscape. This is particularly manifest to persons from the city. It is generally long before they become oblivious to their disfiguring effect, and the annoyance and inconvenience they occasion."

BOSTON—ORIGIN OF THE WORD.—In the seventh century a pious monk, known as St. Botolph, founded a church at a place called Y-cannho, on the English coast, Lincoln Co. The town which grew up around it was called Botolph's Town, contracted into Botolph-ton, Bot-ol-ton, and finally Boston. It was from this town that the Rev. John Cotton came to America, and gave the name to the seaport in which he settled in Massachusetts.