

factures of the world can ill afford to have no part in this important branch of human industry. One need only to visit the great centres of linen manufacturing in Ireland and on the Continent to be convinced that, next to the manufacture of cotton goods, this is the most remunerative of the fiber industries. A study of the comparative consumption of linens and cottons shows that with the steady rise in the standard of living of the masses in civilized countries, the per cent. of linen goods used is steadily increasing. To one in possession of the facts about this great industry, and especially about its early establishment in this country, it must be a matter of great surprise that this enterprising nation has allowed the industry to slip from its control.

Certain agricultural conditions are necessary. The most important of these is the cheapness of lands compared with values in Ireland and on the continent, where flax is now largely produced. Next to this in importance is the greater native fertility of our soils. A yet further condition in favor of the United States, especially in New England, is the fact that thousands of the best farms have been abandoned and ten thousands of acres of land of much higher native fertility than those under cultivation in Europe, now lie in idleness, or practically so. These conditions joined with the proverbial skill and enterprise of the American farmers, should give them a decided advantage in this enterprise over European competitors. We need only learn their methods of close and intense farming to surpass them easily in the growth of flax; at least to the extent of providing fiber for the production of linen fabrics for home consumption.

A final condition worthy of note which would be established by the introduction of this industry into New England, is the building up of a home market for all kinds of manufactured goods. If the abandoned farms of New England could be repeopled by the growers of flax, New England by this intense form of farming could support a rural population many times as great as she has ever supported.

After a careful examination of all that has been written upon the subject, and as a result of personal investigations covering a period from my visit to Ireland and the continent for special investigation in 1851 to the present time, I venture the following practical suggestions about how to proceed in the establishment of the flax and linen industries in this country. What is needed first is a capable and progressive committee from a representative body of manufacturers to co-operate with the United States Department of Agriculture in carrying their recommendations into effect. Abundant information of the most detailed and reliable kind is at hand, illustrating every phase of the industry from the selection and preparation of soils up through every step of the agricultural features, as well as the processes of manufacturing, to the finding of the consumers for the finished manufactured products.

A committee, representing a body of capitalists of adequate resources, such, for example, as our New England Association, is an absolute prerequisite as a preliminary step. Such a committee, with a paid secretary, who should devote his whole time to the business, should address itself at once to the following tasks. First, they should acquire by lease or otherwise a plant sufficiently commodious for adequate experimentation, in a locality where a score or two of farmers are willing to grow a definite number of acres of flax each. The committee should have power to import the very latest and best machinery, both for scutch mills and for the manufacture of linen goods—in short, should be empowered to do in New England what has already been so successfully done in Canada and Michigan. When such a committee is ready to proceed, backed by such an organization and by the representatives in Congress of such a constituency as New England boasts, there is no doubt that adequate protection in the form of a tariff on importations could be secured. Even without protection a beginning can be made in the opinion of all experts on the question. But with protection, by making use of the abundant information at hand, there is not the slightest risk. Indeed there is every reason to believe that financial success is certain from the beginning. It is equally certain that the growth of the industry will be steady and substantial from the first, since every possibility of failure has been anticipated by previous experiment. Once sure of their ground through such an initial step, the committee should be authorized to acquire large tracts of suitable

lands in the vicinity of present plants and water privileges, to which the industry may be extended as rapidly as is expedient, the distinct aim all the time being to supersede the making of coarser cottons by the making of linen fabrics. As fast as the space now occupied by coarser cotton machinery can be utilized by linen machinery, the cotton machinery should be transferred to the South, where mills should be established or acquired by the association. This double plan will secure to New England the great and remunerative linen industry to take the place of the coarser cotton manufacturing that you are bound to lose in the end, anyway, and will enable New England capital and brains to compete on equal terms on its own grounds with the South, that is taking the coarser cottons from us on account, chiefly, of certain distinct local advantages, as we believe.

PEARL BUTTON MAKING.

In former years pearl buttons were foremost in the list of exports from Austria to the United States. Nowadays a pearl button destined for sale in the American market is a rarity. For some time, says a writer in the Dry Goods Economist, a movement has been on foot to develop in the United States a domestic manufacture of pearl collar and other buttons. American manufacturers who have branched out in competition to the Austrians enjoy advantages which only good machinery can give, and what is more important, they are willing to pay slightly better prices for the shells, a condition arising from time and money saved by machinery and better prices realized. The production of pearl buttons in the United States, however, has not as yet had much to do with the general falling off in Austrian exports. Dealers here say that thus far only inferior goods can be made in the United States, viz.: buttons for use on underwear and other garments, where quality is secondary. Good, one-piece collar buttons cannot successfully be produced there in view of the fact that no machinery capable of doing the same clear, symmetrical work that is done by hand in the United States has been put on the market. But they expect the problem of machinery to be solved satisfactorily ere long.

The lethargy of the Vienna button trade, resulting from the closing of the American market to their output, is remarkable. There used to be a number of large factories, employing as many as two hundred workmen, in active operation all the year round. To-day many of them are shut down. The employees earned good wages—often \$6, \$7 and \$8 a week, amounts that are uncommon here. The majority of these men have had to quit work and learn some other trade. The commission merchants, who yearly cleared big profits, have been obliged to take up other lines or retire on their earnings; so not only have the general class of factory employees suffered

The manufacture of buttons was also carried on largely as a "Hausindustrie," which means that the laborer was permitted to carry the material supplied him home to be fashioned. The machinery being crude, all the members of the family were able to help the paterfamilias, and in this manner one family could get through with an exceedingly large amount of work every week and lay away snug little sums for a rainy day. This happy epoch in the button-makers' life has passed, for the demand will not supply so many with work.

True, when the dealers recognized the hard fact that America would never again be the market it used to be, they cast about for new outlets, with the result that fair-sized shipments go pretty regularly to the East. This market, it is hoped, will, when worked vigorously and systematically, bear appreciable fruits, but, naturally, merchants do not expect to find in the Orient a second America.

A comparison of the prevailing prices for different grades of raw pearl with those of years gone by elicits the information that tariff and competition alone are not wholly to blame for the present sluggishness of trade. The Austrians have had to contend, to a great extent, against high prices. Within the last eight or ten months, and even earlier, the cost of raw material has advanced almost 40 per centum, and in addition thereto difficulty is found to obtain shells in sufficient quantities owing to the fact that better terms are offered to producers by America.

In Vienna, the shells used mostly in the manufacture of one-piece collar buttons are of Red Sea and Mediterranean growth, which cost, per pound, in the neighborhood of 35 cents. The product of these shells are the so-called hand-made buttons, which are still exported in