

The new machine consists of a series of jointed brushes moving in *quasi*-elliptical guides, on which the rags are placed, being first cut into suitable pieces. On these brushes they are carried under a cylindrical brush, which turns at greater speed than the jointed brushes move, and thus keeps the rags straight; behind this brush there is a wooden cylinder armed with steel teeth, which catch the threads from the woof and remove them from the warp, and then deliver them on to a second cylindrical brush, which in its turn delivers them on the discharge roller, from which they fall, if it be silk, in large flakes, the warp remaining on the jointed brushes in long fleecy fibres, from which it is also removed as it comes round to the discharge point. The fibre obtained from silk rags is in every way equal to that from which ordinary spun-silk is made, and will doubtless be used for the same purposes, and for the warp of ordinary silk with thrown silk for the woof. In operating on mixed fabrics, whether woolen or silk, where the fibre of the material is not mixed and spun together, but where the commoner material is used for the warp and the better for the woof, this machine effectually separates the two materials, the woof being removed in fleecy flakes, while the warp remains attached to the jointed brushes. We saw several examples of this, where the fabrics were of cotton and silk, and cotton and woolen. In both cases the cotton warp was left perfectly intact, and the silk and wool were perfectly removed without in the least breaking the fibre.

The machine we saw in operation we understand will produce about 120 lbs. of silk from the rags in a day by the simple attendance of one boy or girl to feed it, and a one-horse steam engine will drive three of them. The silk rags, we were told, can be bought at present for about $\frac{1}{4}$ d. per pound; but about half of the weight is waste, being simply dirt or seams and other parts of old garments which cannot be used. This raises the price to a penny only. The charges that come against it are for assorting the rags, cutting into suitable sizes, washing, feeding the machines, and driving-power. Those charges are all comparatively light, seeing that no skilled labor is required. The profits must consequently be very great, when such a valuable product as raw silk is picked up as it were out of the very gutters; such rags having been considered till now as of no value. We were allowed to manipulate the machine ourselves, and, having placed some pieces of silk rag on the hinged brushes, we had the pleasure of seeing thrown out at the other end of the machine a large flake of fine fleecy silk, the fibres in which we found to be from two inches to six in length, agreeing in lengths with the various pieces of rag which we introduced, clearly shewing that the office that the machine performs is simply unraveling but not at all injuring the fibre. Its operations on woolen rags are equally successful, but we have laid more stress on the unraveling of silk, it being the more difficult of the two, and not having before been done. This machine is at present only exhibited privately for reasons before stated. We hope in time to be able to give a fuller account of it with drawings.—*Mechanics' Magazine*.

The Sidney Cheese Factory—The profits of the Trade.

The annual meeting of the stockholders of the "Front of Sidney Cheese Factory," was held on the 3rd January inst. The following is an abstracted statement of the summer's business which we commend to the careful perusal of the farmers of the country:—

Cost of factory, including building, vats, machinery, waggons for drawing milk, cans, &c., &c., \$2,250. The number of cows from which milk was received was 220, and the quantity of milk received 581,371lbs., during 165 days. The amount of cheese made and sold was 59,498lbs., which realized \$7,706.80. Expenses of manufacturing including making, drawing milk, boxes, freight, commission on sales, &c., \$1,554.33, leaving a nett balance of \$6,151.97, which was divided among 19 stockholders, each man receiving a cheque for his money. The factory commenced operations on the 10th of May, and closed on the 15th of November. No milk was received at the factory on Sunday, the milk obtained on Sunday was retained by the stockholders. We may here mention that the stockholders consist exclusively of those who furnish milk, each cow representing one share, so that every man furnishing milk has a proprietary interest in the factory. The success which has attended this factory has given the liveliest satisfaction to every stockholder, proving, as it does, that the manufacture of cheese not only pays, but is highly remunerative, and therefore cannot but be an incentive to others in different parts of the country to establish factories; it will render them to a certain extent independent of the grain market, and at the same time improve the land. The more advanced farmers have learned that it is time to adopt some system by which their lands can be reclaimed from the exhausted state to which the constant cropping has reduced them, and there is no more effectual way of doing this than by establishing dairies. Many have been under the impression that the selling of milk to, or of sending it to a factory was not as profitable as manufacturing butter and cheese themselves. Those who have supplied the Sidney factory have come to a different conclusion. The summer's business has convinced them that the most profitable use to which they can put their land is to stock it with cows, and supply milk to the cheese factory. The figures which we have given above show that each cow has netted, in cash, within a fraction of \$28 to its owners from the 10th of May to the 15th of November and one day's milking besides. But if we had the exact time that milk was furnished from the cows, it would show an income of over \$30 per cow, because in the figures given above we have made the calculation upon the assumption that milk was obtained from 220 cows for the whole time, when the fact is the full number of cows were not obtained until the middle of June. The best illustration we can give of the success and profitability of cheese-making is one in connection with this same factory. A man in the spring borrowed money and bought cows, and sent the milk to the factory during the summer. This fall when the division was made, he received sufficient money as his