board, similar to those used by printers for pressing the sheets of books. Between each piece of cloth, for many are pressed at the same time, are two iron-plates, each one half the width of the cloth. If the cloth is to be hot pressed, an operation not applied to the best cloths, as the patenting supersedes the necessity of this process, these plates are heated ; but this only gives a gloss which is a poor substi­tute for that beautiful face which our finest cloths exhibit. The cloth is now finished, and is packed in bales for market. Sometimes it is cut into ends or half-pieces.

With respect to the worsted manufacture, we need not tax the reader’s attention at any great length, as most of the processes have been described in other articles, to which we shall refer.

The wool employed in the worsted manufacture is the long or combing, as distinguished from the short or cloth­ing wool ; and the object of all the preparatory processes is to facilitate the production of a finer and more perfectly spun thread than would be fit for fulled cloth. By the operations of worsted spinning, indeed, the felting property of the wool is greatly impaired, though not wholly destroy­ed, and the worsted fabric is not homogeneous, like the fulled cloth, but is reticulated like linen and cotton fabrics.

The several processes of a worsted factory are as follows :

1. Sorting,

2. Washing,

3. Drying,

4. Plucking,

5. Combing,

6. Breaking,

7. Drawing,

8. Roving,

9. Spinning,

10. Reeling,

11. Weaving, &c. &c.

For the worsted manufacture, the washing of the wool is very carefully performed with soap and water, the greater part of the moisture being pressed out between rollers. The wool is then carried to the drying room, where it is spread on the floor which is over the boilers of the steam- engine, by which a high temperature is kept up.

When the wool is thoroughly dried, it is passed through a machine called a plucker, which consists of a pair of spiked rollers fed by an endless apron. By the revolving spikes of this machine the fibres of the wool are cleansed and straight­ened ; and as the interior is furnished with a fan or blower, the wool is blown out at the opposite end of the machine.

The wool is now ready for the process of combing, which is performed either by the hand or by machinery ; but as none of the various combing machines which have been in­vented has attained that perfection which has been imparted to other automatic contrivances, the finest long wools are invariably combed by hand. This is to be deplored, as the operation is certainly not healthy. Great heat is re­quired to keep the combs in a proper state, and this heat is produced by charcoal.

Each comber has two pair of combs, one pair having two rows of teeth, and the other three rows for the last combing. These teeth are fixed in a wooden stock fur­nished with a handle, as in the annexed figure. The rows of teeth are one third of an inch apart.

For heating the combs the workman has a peculiar kind of stove, furnished with a hot-plate at top, covered with an­other plate to confine the heat, there being just space be­tween the two to admit the prongs of the combs. This stove is generally heated with charcoal, but in some fac­tories steam has been applied to the heating of the combs, and we believe it has been attended with success.

The workman has also a post affixed in the combing room,

with an iron stem or receiver for the combs, with an upturn­ed end which enters the hole in the middle of the handle of the comb, whilst at the other end of the stem is a pin which enters the hollow end of the handle. The operation of both these pins is to keep the comb sufficiently firm for the workman's pur­pose. In the annexed figure, *a* exhibits the pin which enters the end of the handle, and *b* the upturned end, to which the hole in the middle of the handle of the comb is adapted.

The combing operation is thus performed. The comber first takes a handful of wool of about four ounces, and sprinkles upon it a quantity of oil varying from one fortieth to one sixtieth of the weight of the wool. One of the combs, duly heated, is affixed to the post with the teeth up­wards, and the comber, taking half the oiled wool in his hands, throws successive portions over the teeth of the comb, drawing it through and through, and leaving a por­tion of the wool on the comb till the whole is deposited. The comb is now placed with its points in the stove, and the wool hanging down so as to become heated. The other comb then takes the place of the first on the post, and receives the other half of the wool, when it is also re­moved to the stove. When the combs are sufficiently heat­ed, the comber takes one in each hand. That in the left he holds over his knee, and with that in his right he combs the wool upon the first, passing the teeth of one comb into the wool upon the other, beginning with the extremities of the fibres, and continuing till he reaches the thicker mass of wool, near to the teeth of the comb. Thus the combs gradually approach each other, but without touching, as that would break the fibres instead of laying them parallel, which is the object of combing.

In order that the wool on both combs may be combed equally, the comber frequently changes hands ; but when it is nearly sufficiently combed, he continues to comb off the one comb on to the other, so that nearly all the wool is gathered upon one comb, and hangs down in a long lock. This comb he warms for a short time, and fixes in the post, and proceeds to draw off the fleece in a continuous sliver. A small portion of short wool remains on the combs after the sliver has been drawn off. This is called *noils,* and is sold to the cloth-makers. The wool then undergoes a second combing at a lower temperature, and being collected in parcels of ten slivers, is ready for the next operation.

Several machines have been invented, designed to su­persede the hand-combs. That which has been adopted to a considerable extent, and which we had an opportunity of seeing in full operation in the worsted spinning establish­ment of the late firm of Messrs Hindes and Derham at Leeds, is a foreign in­vention, but patented in this country by Mr John Platt of Salford, in Novem­ber 1827, so that it has now stood the test of fourteen years’ trial. It consists of two revolving combs, fixed in a frame, as in the annexed figure, and inclined at an angle of twenty-seven degrees. These wheels are in the or­dinary form, with comb-teeth set at the edge of the rim, at right angles to the radii of the wheel. These wheels are made to revolve with great rapidity at first, at such a distance that the extre­mities of the wool, thrown off by centrifugal force, can alone be combed ; but the circular combs are made gradu­ally to approach each other, so as to imitate the hand pro­cess, as already described. This motion is effected by mount­ing the axle of one of the wheels in slides ; the traverse move­ment being effected by means of an endless screw, attached to the under part of the frame. The frame-work of the