

at the beginning of the process; besides, the butter is not so much beaten and toughened, by repeatedly passing under the blades, as in other machines; it is found, therefore from all these causes united, that the quality and quantity of the butter are improved, and the labour decidedly lessened. In using a thermometer, this machine possesses convenience for making a true observation of the temperature, for, in other machines the process must be stopped to try the heat, in this, the thermometer may be suspended constantly in the smaller division of the churn, and the temperature accurately observed at any time while the process of churning is going on.—Price £4.

Among the *Cheese Presses* that were shown, we may refer especially to that by Mr. Buckshaw, of Longstow, near Market Drayton, Salop. This press is so fitted that it will press different weights, from 5 cwt. to 30 cwt., with the same ball, merely by shifting a small roller which acts as a fulcrum, into the different recesses made for that purpose in the lever.—Price £3.

Flax Rippling Machine.—An efficient implement, invented and exhibited by Mr. J. Dickson, of 29, Broad-street-buildings, London. This machine is constructed entirely from cast and wrought iron, on a frame about $3\frac{1}{2}$ feet in height, the rippling teeth being set at right angles with each other, and bevelled from top to bottom, so as to cut off the seed balls as the Flax-stalks are pulled down and through them, the tearing off of the seed being thereby effected without damage to or shortening the fibre, whereby the full value of the crop is preserved for the spinner's use.—Price £3.

Harrows.—The prize was carried off by Messrs. Saunders and Williams, of Bedford, for their Set of Patent Four-Beam Diagonal Roll Harrows. The form is diagonal, and the set consists of three, and are drawn by two horses; the teeth are so constructed that each cuts a separate track. The draft being from the centre, gives them an advantage, so that if one horse moves more forward than the other, the Harrow is not put out of its working lines by it.—Price £4 15. The Norwegian Harrow is exhibited by many implement makers, thus proving the general opinion of its excellence. Messrs. Stratton, of Bristol, the original makers, give the following statement about it:—"In its imperfect state it obtained a prize of £10. at Shrewsbury, 1845, and a prize of £5 at Newcastle, 1846. It has since been im-

proved in construction; first, by increasing the number of the spikes on the second and third spindles; secondly, by placing the front spindle higher than the others, so that the Harrow may surmount clods and rough land more easily; and thirdly, by the addition of travelling shafts. This implement is now so well known, having been used in almost every county in England, that it need only be said of it, that it produces a deeper, finer, and cleaner tillage than any other field implement, leaving the land in a state resembling a garden-bed worked by hand. It is intended to follow the plough; and after using the harrow, once going over the land with a fine seed harrow is sufficient to produce the finest tilth. It is made of various widths. The Judges at Newcastle recommend the 5 feet harrow as the most generally useful.—Price £16."

It consists, as most of our readers are aware, of three sets of horizontal parallel axles, carrying a number of rowels or rimless wheels, presenting pointed-spokes, each on each axle being placed opposite, and, in fact, in the interval between two on the adjacent axle. The whole framework, with all these spokes, resting on the ground, is drawn along, and the revolution of each rowel keeps its neighbors from becoming clogged. Messrs. Crosskill have attached one of these spiked frameworks to the frame of a Uley Cultivator or Ducie's Drag. By removing the harrow and affixing the tines, it forms a complete ducie's drag harrow; the cost of both the implements is thus very considerably reduced. The revolving rollers are placed upon round axles, and each acts separately; the same principle as adopted in Crosskill's patent Clod Crusher Roller.—Price, delivered in Hull, £17.

Mr. Smith, of Northampton, has one for hoeing turnips or corn of any interval between the rows capable of being guided, very easily and accurately, by the driver, who is also enabled to compensate a very considerable lateral deviation or fault in the motion of the horse which draws it. Garrett's well-known drill-hoe for corn was exhibited. This implement is for the purpose of hoeing between the rows of wheat, barley, beans, peas, turnips, carrots, and mangold wurzel, or any other crops not drilled less than 7 or 8 inches apart. It is suited to almost all descriptions of soil, and from its extreme simplicity may easily be managed by any agricultural workman. Price £18.