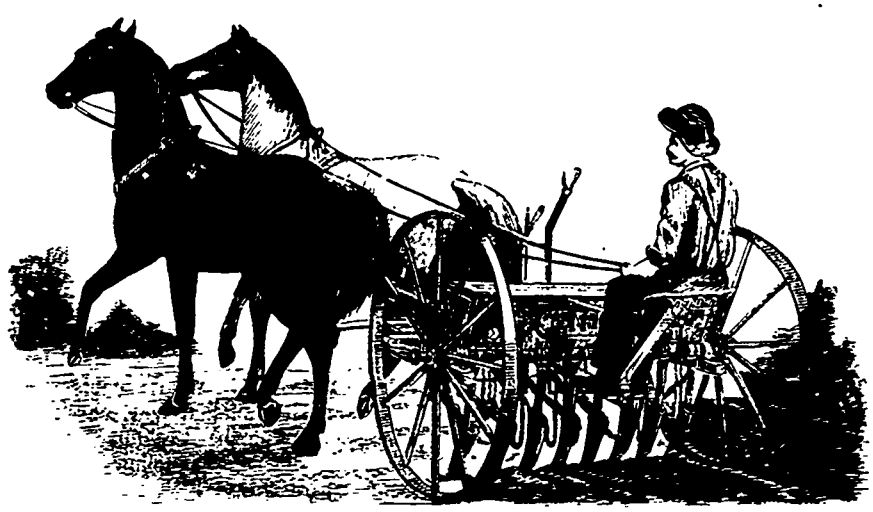
material is put in the pit, covering boards are placed over it, and a stout transverse beam is laid on the top stretching from side to side of the silo In the ends of this beam are fixed brackets to carry moveable rollers, over which the ends of the chains from either side are led. A chain-tightener is then hooked into the links, and on turning the handle of the screw the ends of the chain are drawn together, causing the beam and covering of the silo to sink, so to press the material. Pins are then inserted in the links of each chain across the beam to hold it down, when the screw-tightener can be made to take a fresh hold on the chain for further pressure or be removed altogether. Any number of beams may be used, according to the length of the pit and the pressure required per square foot of surface but the chain tightener and rollers can be removed from beam to beam, so that only one set is sufficient for any number of silos. What are really required for each beam are the two chains and two brackets or bearings into which the chain rollers are placed when in use. If for example, a silo of 15ft. long by 12ft. wide is to be pressed with a pressure of 300lbs. per square foot of surface, two beams would be required, each having its two chains. In tightening the chains a pressure of 8 tons can be put upon each beam, or 16 tons on both, and this force, divided by the area of 15ft. by 12ft., equals 200lb per square foot of surface. The silo may be any reasonable depth; an extra length of chain being all that is wanted. Should a greater or less surface pressure be required, it is only necessary to place the beams nearer together or further apart So easy and powerful is the action of the chain-tightener that it is found one man, by exerting a power of about 60lbs (theoretically 40lbs), can put a pressure of 8 tons on the beam; therefore one man only should use the screw, or unnecessary pressure may be obtained By exerting the pressure once daily for about a week, is found that the ensilage cannot be compressed further, except at considerable intervals; the application of continuous dead weight is therefore unnecessary. By these patent appliances, the pressure can also be instantly released and the boards removed to complete the filling of the silo, or when the ensilage is to be cut; the pressure can also be applied at any depth of the silo, either at the extreme, top or at any distance from the bottom. The covering boards for the silo may be two inches thick, and the tranverse beam for a silo of 12ft wide should be about 9 inches wide by 7 inches deep. It is somewhat difficult to explain a process of this description without diagrams or models, but to use a familiar illustration, it will be seen by readers who are able to follow the above explanation that the whole mass of ensilage is thus brought into the condition of a tightly-bound parcel, somewhat after the manner of packing a bale of cotton, with the difference only that the compression is affected by the aid of screw contraction instead of by hydraulic power. Those present went fully into the subject, asking numerous questions and receiving full and satisfactory replies.



UNION GRAIN DRILL.

Ensilage and Siloes.

(1) I AM a firm believer in the advantages of ensilage and silos, but the difficulty I have is their application to tenant-farmer's requirements, on account of the cost of the latter.

I sent my firm manager to attend Mr. Jenkins, the talented Secretary of the Royal Agricultural Society, on his late visit into Yorkshire, and what he reported as having seen has not removed my fears So I await Mr. Jenkins' promised report with much interest. The subject is not altogether new to me, which I will explain if you will kindly allow me.

It is fifty years since my late father tried the experiment of "tubbing brewers' grains". He selected, I think, twenty butts of 108 gal., which were not sweet enough for trade purposes. These were filled with brewers' grains, hot from the mash tub, well trodden in by men, a sprinkling of salt every 3 inches (the expected benefit being in making the grains palatable to the cattle, and rightly or wrongly, the salt was supposed to check excessive fermentation): over the tubbed grains was a layer of spent hops, and on the top of all a layer of moistened clay. At the end of twelve months the tubs were opened, and the grains were found to be as sweet as when put into them.

This successful experiment led me in after years, when grains were superabundant, to 'camp" them. Boards of wood for the sides were used, and supported by stakes driven into the ground, the grains trodden and covered as before described There is no occasion for this now, as the large quantity of grains made by the Burton brewers are taken as they are made, and siloed by the dairy farmers of Derbyshire and Staffordshire, and it would, I think, be of advantage if this system was inquired into by those interested. My friends at Burton-on-Trent, Messrs Allsopp & Sons—from which house I have retired, after being the senior partner for a great number of years—would, I feel sure, give all required information.