



THE FOREIGN MEAT TRADE.

We have frequently referred to this new business of exporting beef and mutton, which promises to have a most important influence on our system of agriculture. That our readers may have some idea how this business is carried on, we have prepared the accompanying engravings, to illustrate the methods of preparing the meat. In figure 1 is shown the scales where the cattle are weighed, not singly, but in a drove of 40 or 50 at once. This scale has a capacity of 100,000 lbs., which is equal to the weight of 50 head of 2,000 lbs. each. None but the best cattle are taken for this trade, and most of them will go over 1,500 lbs. each. When weighed, the drove is taken to the slaughter pens, as shown in figure 2, and when there are very rapidly reduced to beef. The method of preparing the carcasses is shown at figure 3. A steer is hitched by the hind legs to a rope, and is instantly hoisted out of the pen on to the dressing floor, where it is killed, skinned, and halved. The sides of beef are moved to a cool room, to hang for a few hours, and the quarters are then sown up in canvass bags, after which they are removed to the steamship, and hung up in the refrigerator (see fig. 4). The refrigerator (fig. 5) is an air-tight compartment, lined with non conducting felt; in the center of it is an ice-house, seen in the engraving. A current of air is drawn into the ice-house by means of a fan, operated by a steam engine. The air, cooled by passing through the ice, is forced out at the bottom of the ice-chamber, through ventilators (seen in figure 4), and after making the circuit of the room, and cooling the meat, the air-current is drawn out through a door at the upper part of the room (also seen in figure 4), and is again forced through the ice, and then again through the meat-room. Whatever moisture is gathered by the air from the meat, is condensed in the pipes which pass through the ice, and escapes along with the waste water from the ice through the drain, shown in the plan, fig. 5. In this way the

air is cooled, dried, and purified, and the meat, kept in the most perfect condition, reaches its destination in far better order than it frequently appears in at the shops in this country. The favor with which this exported meat—mutton as well as beef—is received in England, is a guarantee that the business will increase as long as we can produce the cattle and sheep at the price at which they now sell in the market. It is very certain that the prices of beef would decline rapidly here, if it were not that the surplus is thus exported; as so many as 2,000 head of heavy cattle, taken from our markets in a week, must necessarily have a tendency to lower prices, if they were all to be sold here on an overstocked market. This fact, and that there is a profit now in the business, would show that the trade is likely to continue and increase.

A SIMPLE test for the presence of free acid in machine oils, so the *Montan Zeitung* for September informs us, consists in pouring the oil to be tested over a layer of cuprous oxide contained in a glass. (The ash of the coppersmith answers the purpose, since it contains this oxide.) If the oil contains either free, fatty or resinous acid, the same will attack the oxide and color the oil green in a very short time. Slightly heated accelerates the action, which manifests itself in less than half an hour. This test is said to be very delicate and more satisfactory than any hasty test heretofore devised.

HOW TO MAKE SIZING FOR WALLS. — Size to make paper stick to walls is made by adding 8 ozs. of dissolved glue to a pail full of hot water. Apply the preparation to the wall with a whitewash brush. Be particular to touch every part of the wall, especially the top and bottom. Allow the size to dry a little, and hang the paper with paste as usual.