In a Meat Packing Plant

It is probable that every Guide reader knows how his live stock is handled at the yards, but just what process of evolution the animals pass through in becoming meat, they are probably not as well informed. The writer had but a very crude knowledge of the process until a trip taken recently through one of Winnipeg's abattoirs. The abattoir visited is undoubtedly the most modern in the city, though those in charge style it but a "toy packing house" when compared with the big plants at Chicago and other packing centres. However, the same methods are used as in the larger houses.

The first section of the business covered was the pork packing department. The swine are unloaded from the cars into a long sloping chute that leads to the top floor of the building. From the chute they enter a room in the centre of which a large wheel revolves, over which runs a belt with hooks at regular intervals on the rim. In this room all is confusion. Several brawny specimens of pig killers are stationed there. They attach a shackle to an animal's hind leg. On one end of the shackle is a ring. This ring is slipped over one of the hooks on the belt and in less time that it takes to tell it, the porker is on his way to his death. The belt carries the struggling animal to the sticking room where a fierce looking sticker with a long knife puts an end to the struggles with one stroke that severs the jugular vein.

Out of the sticking room goes the carcass and into a vat filled with boiling water. After a few minutes in the scalding bath the pig is hauled out and put through a machine that scrapes off the bristles. This is quite a wonderful sort of machine, almost human in intelligence, the workings of which the writer will not attempt to describe. The carcass is taken out of the machine and any few bristles that remain removed by hand.

In the room where this takes place there are a number of workmen who perform the last sad functions upon his hogship. In the centre of the room at a small table is stationed the government inspector. A workman severs the head from the animal and places it upon the inspector's table. He quickly examines it, especially around the throat, for evidences of disease. The two diseases most commonly met here are tuberculosis and measles. The body passes out of the jurisdiction of the headsman and goes to a workman who in a few seconds removes the entrails. These are also placed on the inspector's table and in turn come in for a rigid scrutiny. If he finds anything wrong he attaches a tag to the carcass upon which is printed the word "hold." He lays the entrails and head to one side for further inspection and final condemnation. He also makes an entry on a card showing the disease and its severity as indicated by the entrails.

A Tuberculosis Case

While the writer was present one very bad case of tuberculosis came out. This disease is easily found by an examination of the lungs and liver of the animal. In the case mentioned both organs were badly covered with grey spots. This is a sure sign of the disease. All the carcasses are washed, split and weighed, then run by gravity down to the next floor where they are hung until the animal heat passes out of the flesh. The carcasses marked by the inspector are hung separately from the healthy ones for a final inspection. Some of these are found untouched by the disease, it having been confined to the entrails; others are found that may be used for lard, the heat killing all disease; while the worst are absolutely condemned and can be used for nothing but fertilizer.

The healthy entrails and heads are sent down to the offal room, while the unhealthy ones are sent to the fertilizing plant. In the offal room the sausage cases are separated from the balance of the offal, which is placed in rendering tanks and for ten hours rendered in steam under high pressure to obtain the tallow. The residue from the tanks is sent to the fertilizing plant.

After a few hours the animal heat has passed out of the carcasses on the hanging floor and they are run into the cooling room, where a temperature of 28 to 30 degrees is maintained by an ammonia cooling system. The carcasses must be hung forty-eight hours before being cut up into loins, hams, shoulders, backs, bellies, etc. This last takes place in the cutting room, from which metal chutes lead down to grading tables on the next lower floor. On these tables the cuts are graded for curing as to weight, for a larger ham takes longer for curing than does a smaller one. The loins are, of course, not cured, and go direct from the cutting to the packing rooms. After the hams, backs and bellies are graded they are placed in vats, all in a vat being approximately the same size, and covered with pickle. When well pickled they are sent to the smoke house and there smoked over hard maple fires. Out of the smoke house into the packing room is the last step for these parts. Here they are stamped, wrapped and labeled ready for sale.

The surplus fat is sent to the lard refinery where it is hashed up, put in kettles and subjected to a great heat. It is then strained and run down over a cooling roller. Automatic knives scrape the lard from the roller, which is kept cool by an ammonia process, and it is then packed in the tins. Another very important part of the pork packing is the cooked meat department. The greatest output from this is boiled ham. The hams are first boned, then pressed into metal cylinders by machinery after being covered with canvas. When boiled in this manner the hams come out in the best possible shape for slicing. Other parts of the carcass are converted into sausage of various grades.

Making of Beef

Beef carcasses do not pass through as long a process as do those of the porkers. The cattle are first driven into the "knocking pens." These pens are just wide enough for two animals abreast. The killer stands on a platform at the side and when the pen is filled, knocks each animal on the forehead with a heavy hammer. One blow is generally enough to lay the steer out. When all are down, the side of the pen opens out and the floor tilts, throwing the bodies out onto the floor.

They are quickly hoisted into the air by their hind legs, bled and the head taken off. The head goes to a government inspector, the same as with the hogs. The same inspection is maintained as for hogs. The most common diseases encountered are tuberculosis and lump jaw. The carcass is lowered to the floor and skinned, experts removing the hide in a very few minutes. This floor is inclined, and a constant stream of water runs off all blood and dirt into gutters. After skinning, the carcass is again hoisted, the entrails removed, the carcass split and washed thoroughly. The entrails go through much the same process as do those from the hogs.

As the beef is mostly shipped in half carcasses, there is no need of as extensive cutting rooms as with the pork, but a small amount for city trade is cut up on the premises. The process of getting it ready for market is also shortened, as no parts are smoked. The sides are run from the killing floor into a hanging room with a temperature about the same as that of the pork hanging room. The beef room is also cooled by ammonia and insulated by cork and cement. Besides this room there is a beef freezer where the temperature is kept at from 10 to 15 degrees below zero. Sides hung in this room are frozen solid in a short time.

The abattoirs also do a large business in poultry, eggs, butter, cheese, etc., and a large section is given over to the handling of this business.

One of the things that surprises a visitor to a packing plant such as the one here described is the total absence of objectionable odors. Every part of the plant is so constructed that no dirt can find lodgement, and every floor is being constantly cleaned off with scalding water. Another point that strikes a visitor is the manner in which the system of "division of labor" is worked out to its fullest extent. Every workman is as a cog in the machine; each has his small part to do in the preparation of the meat for marketing. Each does his one part and nothing else. It doesn't tend much toward the mental development of the workmen, but works out fine in results for the packer. And everything is used except the ——, no, I haven't the heart to say it, that squeal has been worked too hard already.

HOW IT WORKS

Mr. Daniel W. Doty, attorney-at-law, St. Paul, Minnesota, owns a farm at Maryfield, Sask. On this farm this year sufficient wheat was grown to load two cars. The first car was loaded over the platform by the tenant, and according to machine measure it should have contained 1,050 bushels. The car showed an outturn of 1,058.10 bushels gross. The machine measure for the balance of the crop was 870 bushels, but on taking this to one of the elevators at Maryfield the weights only turned out to be 853.39 bushels. Just notice the difference. From this weight of 853.39 bushels the elevator operator takes off 13 bushels of a dockage, leaving a net weight of 840.39 bushels. The first car which was shipped over the platform and consigned, graded 1 Northern, 1 per cent dockage, while the second car received by the elevator operator was special binned. The elevator operator would not grade the grain 1 Northern.

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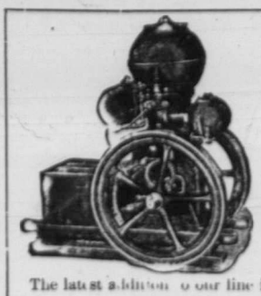

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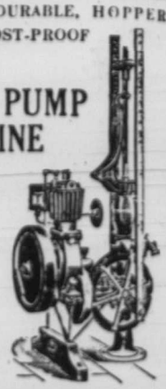

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