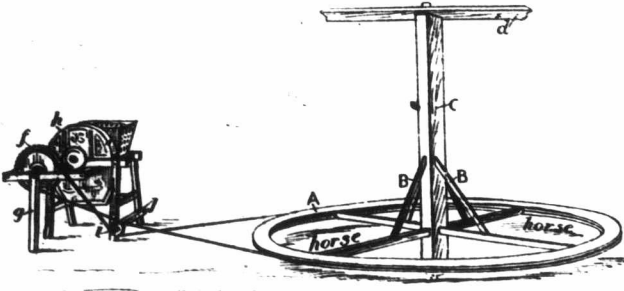


THE HELPING HAND.

Homemade Horse Power.

JAMES HAYDEN, Huron Co., Ont.:—"Having seen so many plans in your valuable paper for cheap horse powers, I thought I would send a description of the one we use for either one or two horses. Our barn floor is fourteen feet wide. I cut out breast beam opposite to granary so as to put in a 16-foot wheel. The rim is built similar to the rim of the curb of a well, by using three thicknesses of inch lumber 8 inches wide, the center piece left in about 1½ inches, so as to make a groove to hold the rope or chain, just like a very large pulley, putting together with bolts, as it can then be taken apart when not in use and packed away. I got cog wheel off of the big wheel of an old binder, and got a smaller one cast at the foundry, which we put on and keyed to the axle of cutting box; then I bolted

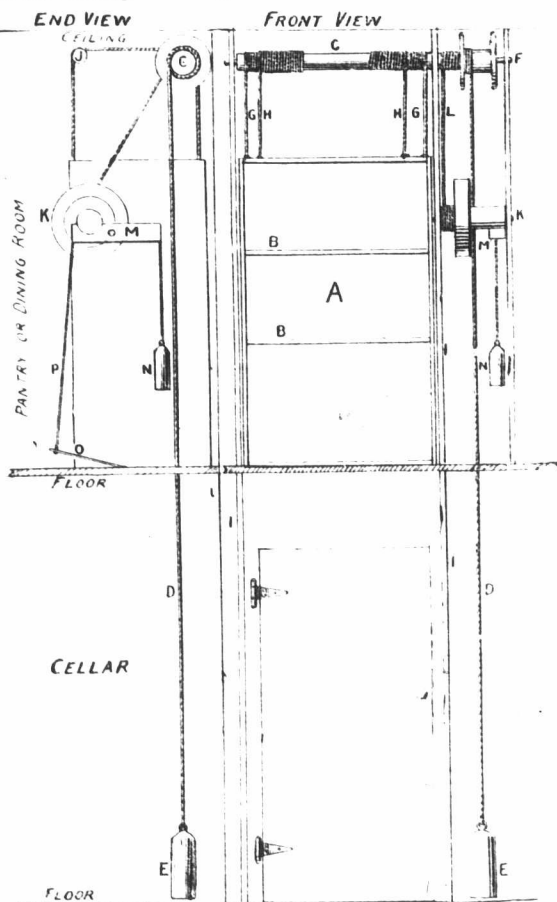


(a) Rim; (b) braces; (c) upright; (d) 2x6 scantling to hold top of post; (e) small cog wheel; (f) driving wheel off old binder; (g) frame to hold gearing to cutting box; (h) cutting box; (i) hayfork pulley to guide rope or chain on large pulley; (j) 2x3 scantling bolted to cutting box to fasten pulley to.

a large pulley (f) to cog wheel, and placed in frame and fastened to frame of cutting box for the rope or chain to work on. The horses turn to left, and it runs about as fast as you would drive it with an engine. It may be worked without gearing by placing a 7-inch pulley on axle of cutting box, but it is much slower and harder to drive, as I have tried both ways. I would not want a better power. I built the rim of big wheel one foot from floor, so the horse can step in without pulling it down, as the horse works inside of rim; then when done cutting all you have to do is unhitch and walk horse out, and it may be left ready for use at any moment."

Cupboard Elevator.

WM. MOUNTAIN, Perth Co., Ont.:—"For sending victuals into the cellar, such articles of diet as bread, butter, meat, etc., which require moisture or cold, an elevator like the accompanying sketch will save much stair climbing. A is the cupboard, 2x3 feet; B and B are shelves, suspended from ropes G H on rollers J and C; C being at the back with weight wheel F; the rollers run in the sides of shaft I, running from ceiling to cellar floor. When cupboard is up, lower end should be level with floor; when down, top end level. Sides of shaft should be a little larger than cupboard, to let it work easily. Weight wheel F is made by nailing



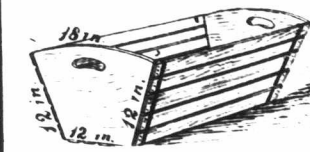
inch strips on to roller C, which is three inches thick. Weight wheel must have flanges to keep rope D on, which carries weight E, which must be heavy enough to hold empty cupboard up in place. Both ropes G H wind on roller C, roller J being only a traveler. Ropes G and H should not be opposite, but allow space for rope rolling on roller C. The cupboard and weight balancing, use fric-

tion wheel K to control the extra weight of dishes and food. Make K from boards. Hand wheel sixteen inches diameter, and rope roller end and friction lever end each five inches. The rope L goes from friction wheel K to C roller. Friction lever M is bolted to outside with two-thirds or more of its length on weight N end, cut out to fit friction wheel. On the other end from weight attach a rope P, and attach the other end to a small tread O, which is fastened to the floor. Friction wheel K is to raise the cupboard when loaded, and friction lever M is to hold it at any desired place. Use three-eighth and one-half inch ropes. The lengths can easily be reckoned according to height required."

Root and Chaff Basket.

J. H. TAYLOR, York Co., Ont.:—"As I see some of your subscribers are sending you useful ideas, I will try to imitate in a small way, hoping some one will try it. I have used for years a root or chaff basket made thus: The ends are made of inch pine, 18 x 12 x 12, and sides and bottom are made out of old salt barrel staves, any length you desire, nailed on and afterwards bound with thin

iron band. The staves are left open or apart about three-eighths of an inch. It will last out a dozen willow baskets of any kind."



QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquiries must in all cases attach their name and address in full, though not necessarily for publication.]

Legal.

Unfulfilled Contract.

ENQUIRER:—"After tenders being called for by the trustees, A was given the contract to supply a school with wood; but A failed to fulfil his contract. 1. Can he be compelled to do so? 2. Are the trustees bound to enforce him to do so?"

[1. If the tender of A was accepted and he was notified of its acceptance in the regular way and within a reasonable time, or if A has partly filled his contract, he of course is compellable to complete his contract or make good in action for damages the loss caused by him. 2. No.]

Right to Cut Trees on Roadside.

ELECTOR:—"Has a pathmaster the right to cut down trees (pine trees—natural growth) on the roadside after being forbidden to do so. The trees in question were standing 11 to 18 feet from the fence?"

[We, of course, understand from the above that the trees stood upon the public highway, not upon private property. The Statute of Ontario, 1892, Chapter 42, S. 479, S. S. 20, provides for such cases, and that section confers upon the council of the municipality power for causing any tree growing or planted on any highway to be removed if and when such removal is deemed necessary for any purpose of public improvement; but any owner of adjoining property shall be entitled to ten days' notice of the intention of the council to remove such tree, and shall be entitled to be recompensed for his trouble in planting and protecting the same. No owner of adjoining property, nor any pathmaster or other public official, nor any other person, shall remove or cut down or injure such tree on pretense of improving the public highway, street, or road, without the express permission of the municipal council having the control of the highway, street, or road.]

Veterinary.

Bone Spavin.

ARTHUR E. GILBERT, Norfolk Co., Ont.:—"Will you kindly let me know if there is anything that will kill a bone spavin? I have had it fired and blistered. Sometimes you could scarcely notice anything wrong with her; at other times she is dead lame. It has been blistered so much that the hair is killed; is there anything that will start it growing?"

[Where bone is deposited on the seat of spavin and it becomes confirmed, there is no method known that can remove it. The object of firing and blistering is to prevent growth and remove the cause of lameness. If the blistering is so severe as to kill the roots of the hair no method will restore what has been destroyed by the destruction of the skin.]

Warts or Wens.

B. SHANNON, Nipissing District, Ont.:—"My neighbor's cow has a large wart or wen on her teat about five inches long, two inches wide and one inch thick. As she is due to calve early, he wishes to know if there is any way of removing it. Please advise as to treatment through your paper?"

[It is difficult from the description to decide to which disease this growth belongs. If a wen it is generally found to exist in the shape of a ball with a growth of hair on the inner side and due to an involution or turning in of the skin. If a warty

growth it is composed of irregular-shaped mass of thick, fleshy material, which grow in clusters and present a raw, bleeding surface, others have a perfectly smooth one. Very little can be done in the way of treatment. They may be dissected out and the wound cauterized with the hot iron or nitrate of silver. A ligature of cord tied around the base as firmly as possible, tightened daily, will cause it to shrivel up, die and fall off.]

DR. W. MOLE.]

Sick Fowls.

C. A. J. Simcoe Co., Ont.:—"Would you please tell me what is wrong with my hens and a cure for them? They turn dark in the head and waste away until they get very light and weak. They are sick about two weeks before they die, and eat hearty all the time. I feed sulphur in milk twice a week, and I have burnt sulphur in the henhouse. The house is in one end of the cow stable and the turnips are kept under it."

[When a hen's head is bright red in color we expect a good yield of eggs, as she is then in excellent health; but a dark head indicates an unhealthy condition, and shows itself in almost every case of indisposition. A fuller description of symptoms would have greatly assisted our understanding the case, but from the location of the house we would say that the trouble is probably arising from too much moisture, poor ventilation and too little exercise in the open air. It would be well to remove the hens to a light, dry, well-ventilated house. The whole flock should be given a good purge with Epsom salts. An easy way to do this is to feed scantily in the afternoon and keep the flock enclosed till next morning. Then mix two heaping tablespoonfuls of salts in a gallon of soft feed and allow them to take all they will. Then give the flock a tonic known as Douglas' Mixture, made up of a half-pound of sulphate of iron dissolved in a gallon of water and half an ounce of sulphuric acid added to one gallon of water. Mix the two together and add two tablespoonfuls to a pail of drinking water each second day. Unless the fowls have some contagious disease the above treatment should put them right.]

Swollen Tongue.

A. C. Middlesex Co., Ont.:—"I have a yearling steer which had a swollen tongue so that it hung out of his mouth six inches. I treated him for lump jaw; got some better, but not cured. What is the trouble, and what the cure, if any?"

[The tongue should be carefully examined to see if any foreign matters, such as barley awns, have lodged at its root, or a gathering may exist, which may need lancing. An ulcerated tooth might so affect the adjoining parts as to involve the tongue. In that case the tooth should be extracted and the cavity stuffed with iodized carboloid acid. The tongue is sometimes affected in cases of lump jaw, and when it is attacked the growth takes place as a rounded hard swelling, which has given rise to the name of *wooden tongue*, which is one of the worst forms of the disease, since the animal, in some cases, cannot eat, and curative applications cannot readily reach the seat of the trouble. A cure has in some cases been effected by administering iodide of potassium internally. A good purge of one to two pounds of salts should be given first, then give daily doses of one dram of iodide of potassium in a mash, gradually increasing the quantity to two drams in the course of a week. If the animal goes off its appetite cease giving the medicine for a few days, and then commence again. In about six weeks an improvement is generally noticed, the lump drying up and disappearing.]

Miscellaneous.

Agriculture in Argentine Republic.

A READER, Huron Co., Ont.:—"Where can I obtain general information as to the price and nature of the soil, and the crops grown in Brazil and Argentina? Where do they find a market for their produce, and what are the freight rates to Europe and the United States? I shall be pleased to learn something of that country in the FARMER'S ADVOCATE."

[We would recommend Mulhall's Handbook of the River Plate (Triibner & Co., London, Eng.); also "The History and Present State of the Sheep Breeding Industry of the Argentine Republic" (John Grant & Son, Cangallo 469, Buenos Aires), by Mr. Herbert Gibson. The author gives the values of land in the different provinces and zones, as well as general information with regard to same. Agriculture.—The soil and climate are fitted for all classes of agriculture. The country produces wheat, maize, linseed, barley, oats, etc., the first three being exported in large quantities. We expect to have from one to one and a half million of tons of wheat available for export when the harvest now ripening is gathered. Consuming markets, principally Europe. Brazil is in great measure dependent on this country for food stuffs and forage, taking flour and maize, as also baled hay ("alfalfa," or lucern), in large quantities. In the upper provinces, sugar, tobacco, wine, "quebracho" (for tanning), seeds for oil, and a new industry—cotton. Arable land varies in price according to proximity to outlets and railway communication. Good land can be bought at 10 shillings an acre, and lands farther out, but in touch with railway facilities, at from 2 shillings and upwards. Freight rates to Europe vary from

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