

The Automobile.

It was after much deliberation and thought that I decided to invest in an automobile. The salesman told me it was the coming mode of transportation, and that the horse must go. I agreed with him. I bought a new horse last summer, warranted to possess all the equine virtues. The first time I drove him I met an auto, and the horse decided he must go, and I guess he's going yet. I stayed with him a while, but made up my mind he was too swift a proposition for me to keep company with. I never could determine whether it is the appearance of the machine, or the smell, or the raiment of the driver, that gets into a horse's nerves, but I reckon it's the raiment.

The first machine I looked at was small, simple, and inexpensive. It had but one cylinder. The salesman said that was an advantage. He said a four-cylinder engine would get out of order four times as often. This machine had a handle on the side like a barrel-organ. He showed me how to make it go fast and slow, and stop and start, and all the while the machine stood in the store. A child of ten years could run it, he assured me. "Now, if you want to get out of a tight place," he said, "get a sudden move on—so to speak—you just touch this lever, called the accelerator."

He touched it, and with that something went wrong, and the handle I have alluded to flew around and smote me violently in the abdomen. When I came to I told him a child of ten might run the machine, but the child would have to have a very strong stomach.

Every auto I thought of buying, all my friends assured me was no good, and in the light of subsequent experiences I guess they were right. Finally, on my own responsibility, I bought that lovely lobster-pink creation in which I may be seen most any pleasant day now, running merrily through the park or street, and, anon, sitting reposefully while my chauffeur, assisted by the populace, explores the vitals of the machine, looking for trouble. I remember when I was a boy I saw and admired at Barnum's museum a working model of an engine, all made of glass, but I never dreamed I should own one.

I am getting proud of my machine. I think it holds the record for having travelled fewer miles in a given time than any other yet devised. My engine will break when standing motionless on the barn-floor, simply through the power of gravitation. It is operated by a skilled mechanic, and costs me as much per month as it would to run a battleship. But it has one merit. I never wander so far from my own fireside but that I can easily walk back. I have worn out six sets of hinges in the hood, peering at the engine to see what is busted.

I used to get up and help the chauffeur to look, until one day, when we were both hidden behind the hood, a sneak carried off my fur robes. Now I just sit back and listen to the jeers of the populace, and sigh to think of the happy times gone by when I used to travel on the street-cars and get to my destination on the same day.—[Simon Ford, in Everybody's Magazine.]

Docking in Michigan.

Michigan has an anti-docking law, whereby all persons owning docked horses are required to have registered them prior to December 6th, 1901. It is also unlawful to bring a docked horse into the State, unless it be so registered. The fine for violation of the law is not less than \$50, nor more than \$250; in default of payment, the alternative of imprisonment for not less than ninety days.—[American Veterinary Review.]

What They are Saying.

The "Advocate" is such a good farmers' paper, one feels like working for its success.
Elgin Co., Ont. WILLIAM LOGG.

To part with the "Advocate" would be to part with an old friend.
Middlesex Co., Ont. WM. H. JOHNSON.

Please find enclosed our renewal of paper, as we could not do without same since it has become a weekly.
Russell Co., Ont. GEO. H. ARMSTRONG.

A Necessity.

I feel it a pleasure to say a few words in favor of your paper whenever an opportunity presents itself, for the valuable information it contains is as anxiously looked for by our family as is a meal after a long fast. Wishing you every prosperity.
Cardwell Co., Ont. F. W. JEFFREY.

STOCK.

The Pig in Clover.

By A. S. Alexander, V. S.

This is to be about a pig purposely in clover—not the vagrant pig, considered out of place in clover, and forthwith chased out of it by a yellow dog. We know that a pig enjoys life in the clover field. That's the reason for the familiar allusion taken for the title of this article. Depend upon it, that enjoyment in a feeding animal means thrift and that the clover is appreciated because it satisfies. The satisfied pig is then properly situated when in clover, and he should not have to break through and steal this nutritious green growth. Experiments have shown that pigs thrive well when fed grain on clover—much better, indeed, than when fed the same amount or more grain in a yard or pen. If memory serves us aright, practical men have found an acre of green clover productive of four to six hundred pounds of hog in a single season, when corn was fed along with the green food. It is making a fresh start each day, when cropped by animals. It throws out fresh, tender leaves, bravely seeking to attain its aim in life. On these new growths animals thrive apace, and the pig, said to be lacking in taste, as a general proposition, is not behind other animals in appreciating the clover salad as a relish to his dry shelled corn.

But it requires an abundant rainfall to maintain steady growth in close-cropped clover—something we cannot confidently count upon each season—and if this blessing is vouchsafed the farmer, his pigs respond satisfactorily. Even without what may be considered a sufficiency of moisture, there will, in an average season, be at least enough nourishment in green clover to produce profitable gains in pigs allowed to graze, and fed additional food in the form of grain. To obtain the great gains alluded to in the foregoing, some men feed one pound of corn per pig each day. Clover is comparatively rich in protein, so that corn tends to balance the ration for even a growing pig, and without it, or some other concentrate, mere pasture would give poor returns. Alfalfa pasture is perhaps the only hog grazing that produces profitable gains in the absence of an adjunct food, and clover comes next in point of maintenance qualifications. Used in conjunction with grain, the clover pasture, if properly handled, has been calculated to save some 2,000 pounds of grain in hog feeding, or even more in some instances. This is surely well worth trying for, and surely proves that the pig is entitled to enjoy himself in the clover fields.

But we are more interested in the little pig than in the hundred-pound porker, with which most of the reported gains have been made. He is "the making of" the mature hog, and the making of the pig is the building of the foundation—the most important part of every structure. Many of our farm friends have gone about the making in an erroneous manner. They have figured that all foods are suitable building material, that corn which furnishes one necessary material may be depended upon to perfectly take the place of everything required in the animal structure. This is like building with nothing but bricks. Mortar is necessary to cement the bricks into a strong structure fit to endure. "All corn" builds a showy structure, but it has a poor foundation and is not strongly welded together. A mixed ration supplies all of the requirements of the growing frame—the necessary materials from which are formed strong bone, ample muscle, dense sinew,

pure blood, tough hoof, adequate hair; and, in short, all of the concomitants of a robust constitution and vigorous system.

The clover pasture grazed, that it may produce fresh growths daily, offers not only nutritious food for frame and flesh formation, but a place in which the pig takes ample exercise, drinks in fresh air, and avoids disease germs. In such a place it is the proper work of a pig to simply grow—not to become fat. But owners seem more interested in creating fat than in building a strong frame to accommodate loads of it later. They do so at the expense of bone and muscle, and in so doing expose the animal to every ill that hovers about debilitated constitutions. The corn-stuffed, non-exercised pig from weaning time forward is rapidly fitting itself as a host for the hog cholera germ. It may suffer meanwhile from some other ailment, the product of incomplete nutrition. Of these the most common is "rickets"—the trouble present when a pig subsides upon his stern and drags his posterior painfully about the place, squealing pitifully for more corn. He is like the drunkard crying out for rum, for he is seeking the very thing that has wrought his ruin. Corn will not build up the bones that are deficient in earthy matters, nor will it strengthen the weak muscles of the loins, any more than more whiskey will set the staggerer straight upon the right path in life. The pig in clover will be sure to escape partial paralysis if fed foods that assist clover in frame-building. Some corn is all right, but not all corn. Corn plus middlings, bran, shorts, milk, dried blood meal—one or more of the foods rich in protein—will build up the growing pig until it attains age and weight proper for the finishing process, when much corn may be fed to a good profit for fat production without great danger of the train of troubles induced by unbalanced rations. We need the strong hogs—the ones with bone and muscle—and the system producing them will also tend to give us prolificacy in the sow, virility in the boar, and a larger measure of lean meat in the side of bacon, and the "ham what am."—[Live-stock Report.]

Calf-raising for Beef.

Beef production starts with the calf. Presuming that the calf is of the right sort, one bred for beef, with a capacity for laying on thick, even flesh, with a high percentage of choice cuts, it must be fed and cared for as well as possible if it is to make a first-class beef animal. Fall calves are preferable as a rule, usually getting more attention than others, as they have the advantage of the time of year when the farmer has most time to attend to his stock. The best way to start a calf, assuming that it can be hand fed, is to leave it with its mother from three to five days. It should be fed only new milk until it is a month old, when it may be gradually changed to skim milk, always fed warm, taking a week for the change. A little boiled flaxseed in the milk supplies the fat removed, as well as is possible. This should be continued at least three months. After the calf begins to eat a little clover hay, which should be kept within reach, and which it will begin to eat when a month old, give a little whole oats, which it will soon learn to eat. Then a regular ration of ground oats and bran will keep it growing and thriving. After the calf gets older, a little pulped roots should be added to the ration if in winter, or green grass cut and carried in summer if kept in a box stall. If allowed out to pasture, access to a shed should be provided for. If the calf is well cared for during the first eight months of its life, it should be in good shape



How Tree-planting Transforms the Prairie.

The grove on the farm of J. J. Ring, Crystal City, Manitoba.