

### News and Information For the Busy Farmer

**A Unique Honor**  
Dr. Robert Harcourt, Professor of Chemistry at C. A. C., in recognition of his services to agriculture, has been honored by the French Government with the Cross of the Knight of Agricultural Merit. The distinction comes as the result of the visit to the college last summer of a party of agricultural students and faculty from Grignon, France.

**Winter Conditions**  
According to current reports of agricultural representatives, winter conditions have prevailed throughout Ontario during December. The weather has been satisfactory except that the water supply is low. Poultry prices have proved disappointing generally, at the height of the marketing season. Many sideroads in all parts of the province have been impassable for motor traffic.

**Sunshine For Poultry**  
Hens need sunshine in their poultry ration, especially during the winter months, when the sun shines but little. Sunshine in the feed is as important as any one of the other ingredients in a poultry ration. Egg production, health, quality of shell, nutritive value of eggs and hatchability are dependent upon it. Cod liver oil or cod liver meal is the best substitute for the direct rays of the sun. Both are quite rich in the sunlight factor and available at a reasonable price. Cod liver meal also supplies liver tissue that helps to build up the blood. The better poultry mash which you buy already mixed either have cod liver oil or cod liver meal as one of the ingredients, so you can buy them secure in the knowledge that your flock will get all the sunshine they need in their feed.

Clipping the cows' thighs and flanks is a big factor in the production of clean milk. The cleaner the cows are kept the less dust and dirt is likely to get into the milk when being drawn.

A good half-day may well be devoted at this time to arranging implements

and tools properly in the implement shed. Cultivating and seeding implements should be left at the front, as they will be the ones first required in the spring.

**Competing For Scholarships**  
Members of the party of 500 junior farmers who attended the Royal Winter Fair this year as guests of the Ontario Government are competing for fifteen scholarships of \$100 each offered by the T. Eaton Company of Toronto for the best papers bearing on the trip and agricultural problems in general. Examinations of the contestants have been conducted in each county and the papers of the first prize winners in the various counties will be examined at Toronto for the final awards.

**The British Market**  
A housewife in England out buying a little bacon for tomorrow's breakfast or an apple or two for the children's lunch, seems a far cry from an orchard or farmyard in Ontario. Yet it is that housewife and the millions more like her in Great Britain who determine, to a large extent, the price our farmers receive for their products. In 1928 Canada exported agricultural products to the value of \$815,000,000, and of this total, about \$400,000,000 worth went to the United Kingdom. But the competition is keen and the British consumer demands certain brands of food. Canadian producers, therefore, must make every effort to satisfy this market, upon which they depend so largely.

**Feeding Scratch Grains**  
The amount of scratch grains to feed layers varies with the different seasons. In winter when nights are long and cold, hens need more of the heat-forming, energy-producing scratch grains than in summer. For the next three months about one quart of scratch grains to 12 hens or 14 pounds to 10 hens should be fed. This should be supplied an hour before the birds go to roost so they will have time to clean it up before dark. Do not feed any grain in the morning as the hens are apt to fill up on it and then will wait for it to digest before eating any mash and obtaining the egg-building materials. A high grade mash should be kept before the hens all the time. The more they eat, the more eggs ordinarily means. Grit and shell

should be hopper fed and drinking water always available. Supply green feed when you can.

**The Seed Market**  
The alsike and red clover seed market continues drabgy at unchanged prices; and with very little moving at present from production districts. The export demand is reported unusually low and uncertain owing to a large visible supply of American and European production. Relatively low prices are being offered to growers and there is a tendency for them to hold their seed. The report from Toronto early this month was that about 25 to 40 per cent. of the 1929 crop of alsike and about 50 per cent. of the red clover was still in the growers' hands. The demand for alfalfa seed is good owing in the short crop of hardy strains this year. Preferred Ontario growers for good quality seed range from 30c to 40c a pound. Timothy seed is also in fair demand and at slightly higher prices than last year.

**Crop Report For Year**  
The final crop bulletin for the year, just issued, comprises an interesting and informative review of agricultural production during the past year. According to this review, fall wheat was better both in quality and quantity than anticipated. The average over the whole province about 40 bushels to the acre. The increased acreage in fall wheat sown this year is about five per cent, rather unexpected under weather conditions. Oats this year yielded but 90 per cent of an average crop. Barley, though good in quality, was deficient in quantity. Corn on the whole was disappointing. Tobacco told the same story. Potatoes are returned as extra good in quality but only an average crop. Turnips are a short crop. Live stock generally is said to be in rather poor condition; hogs are fewer on the farms. Sheep and lambs are said to have done better, and are increasing in numbers.

Farm implements are certainly deserving of more attention in the fall and winter months than they usually receive. The lifetime of an implement may be prolonged and the amount of power required to operate it very much lessened by proper care. Most farm implements rust out rather than wear out.

Clifford Baldwin, of Barrie, Ont., was one of the three members of the Canadian Junior live stock clubs chosen at the Royal Winter Fair to represent Canada at the international joint live stock judging competition in England next year.

### CHOOSE WINTER FEED FOR STOCK CAREFULLY

Some Hints as to the Selection of Feeds for Livestock During the Coming Winter.—Many Points To Be Considered.

In deciding what to feed during the coming winter and spring months, you naturally consider first the roughages and grains that have been raised on the farm during the past year. These feeds constitute your cheapest source of feed supply and it is good economy to so plan your feeding program that you will use as much of them as possible as the basis of your ration.

However, it is equally important to remember that no combination of home raised feeds fully meets the needs of dairy cows, hogs, and poultry, and it is poor economy to feed such large quantities of home feeds that some of the nutrients they contain are wasted, while other nutrients are lacking. It is a wise farmer who realizes it is just as important to know what feeds to buy as it is to know what feeds to raise.

In selecting the feeds needed to supplement home grains and roughages, two courses are open. If desired, one may buy several different ingredients, such as gluten feed, mill feed, etc., and work them into his ration. If a good formula is followed, the advantage of this plan over straight home feeds has been proven to be both sound and profitable. Supplementing home feeds with ready mixed commercial rations is being done more and more. Many feeders who have followed this practice for two or three years claim that this plan is superior to attempting to mix rations at home, both from the standpoint of extra profits and eliminating the bother and labor of mixing. The matter of cost is one of the first questions to be considered. In considering such rations it is important to realize that the profit left after the feed is paid for, is the true basis to judge the economy of a ration rather than its initial cost by the hundred pounds or ton.

Few realize what a surprisingly small increase in production is required to outweigh a seemingly big difference in the initial cost of two rations. This applies in comparing the cost of a good home mixture with a poor one as well as a home mixture with a commercial ration, or in comparing the value of different ready mixed rations. \$20.00 per ton may seem to be an enormous difference in the cost of two mash feeds for poultry. One may readily wonder whether the most costly of the two rations would produce enough extra eggs to offset the difference in cost. A hen eats in one month 3 lb. of mash which at the rate of 1c per lb. amounts to 3c. per hen per month. If the better of the two rations causes the hen to produce only one extra egg the difference is more than offset.

A flock laying 40% or 12 days a month are loafing 18 days a month. If one ration cuts only one day off the 18 days of loafing it is worth \$20.00 a ton more. This same principle applies to feeding dairy cows. Suppose you were considering two rations, the initial cost of which may vary \$10.00 a ton. If milk is worth 2 1/2c. per pound, 2 lbs. of milk per day more offsets this difference of \$10.00 per ton. This is one pound of milking or about one-third of an inch

in the pail—not enough to be even noticeable.

In considering ready mixed rations, they cannot be considered as a general class and all having the same value. There are a number of honest, reputable concerns with high ideals that are striving to build products that will increase feeding profits.

Unfortunately, just as is the case in every other industry, there are a few firms whose products are made primarily to sell, or intended to dispose of some by-product of low feeding value. In selecting a commercial ration, a feeder must use his judgment just as he does in buying other materials needed on the farm.

Another very important consideration is whether the ready mixed ration is intended to be fed as a supplement to home feeds or whether it is made as a complete ration. Obviously, it would be poor economy to buy a fit in mixed ration that would not fit properly with home feed and would either throw your ration badly out of balance, or necessitate your disposing of more of your home feeds than is necessary.

To some extent the analysis may be relied upon as a guide. However, there are a number of important factors that analysis do not show. For example, it tells us nothing about the digestibility of the feed—the amount of protein, carbohydrates, etc., that can really be used by the animal—a very important point. Neither does it tell us anything about the palatability of a ration, and since the more palatable a ration the more easily digested, this is also very important. Neither does the crude chemical analysis disclose anything about the variety of proteins which are absolutely necessary to maintain milk or egg production and keep up the animal's body. Complete protein can only be obtained from the right combination of several different ingredients.

In selecting a ready mixed ration, any feeder will do well to ask himself the following questions in order to best determine which ration will give him the best results:

- How long has the manufacturer been in business?
- What growth and progress has the manufacturer made?
- What has been done to make this particular feed the best dollar's worth of feed you can buy for your money and the best suited to your particular needs?
- What type of dealer is handling the product?
- What can the ready mixed ration be expected to do in the way of extra dollars over feed cost?
- What proof is available as to the results this particular ration has produced?

### THE DUAL PURPOSE COW

(Experimental Farms Note)

Some have questioned the existence of such an animal as the dual purpose cow. However, the fact remains that many Shorthorns of good beef conformation produce sufficient milk to return a profit to their owners aside from the value of their calves which constitute such qualities many farmers prefer this strain of Shorthorn to any other class of cattle. No intelligent breeder of such stock pretends to compete with the dairy breeds in average production of milk per head, nor as a rule does he pretend to compete with the straight beef breeds in the show ring, but he is a strong contender for the highest position as measured by net returns at the end of the year.

The Shorthorn herd at the Dominion Experimental Station, Scott, Sask., was started in 1921 with no outstanding producers. During the eight succeeding years two cows have made records approximating 8,000 pounds to their credit, and eleven have made records of over

5,000 pounds. The herd has been inspected by a great many visitors and no person has questioned the suitability of these animals for beef and waiting lists are on file continually for breeding stock. Without undue forcing. During the winter months the meal mixture used consisted of 500 pounds of oat chaff, 100 pounds bran and 100 pounds oil cake meal. From six to ten pounds of this mixture was fed per head per day supplemented with prairie hay and sunflower silage. When on pasture in summer, a light feed of oat chaff was given at the time of milking. The meal mixture for 1929-30 has been altered for winter feeding and is made up as follows: 300 pounds bran, 300 pounds oat chaff, 150 pounds barley chop and 200 pounds oil cake meal.

Since the autumn of 1927 the herd sire has been Red Marquis-156496-sired by Thanet Marquis (Imp.) which is the sire of White Molly having a record of 18,346 pounds of milk. The dam of Marquis was Rosebud 12 (Imp.) with a record of 11,629 pounds of milk.

Read The Chronicle ads on page 7.

## GREETINGS

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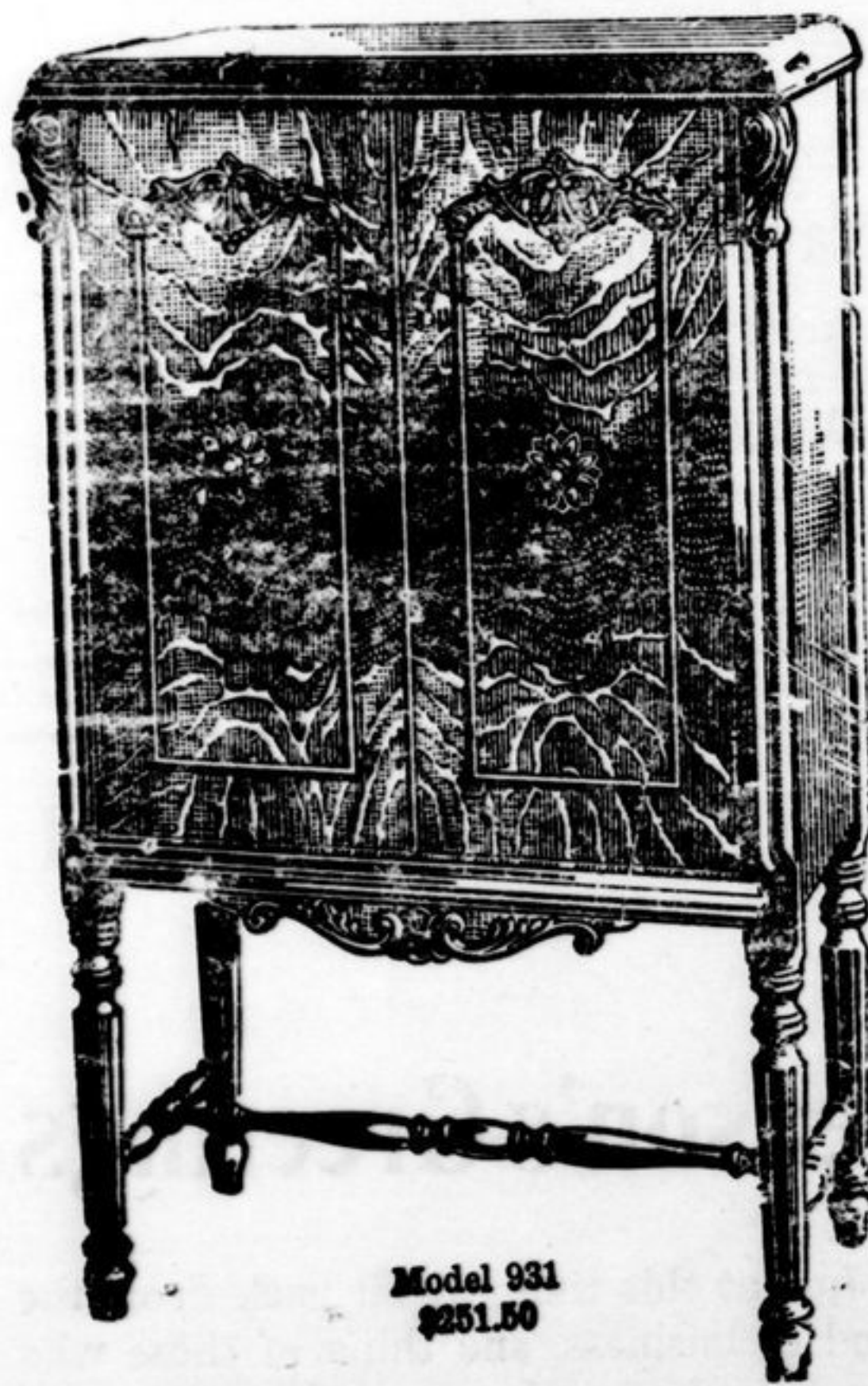
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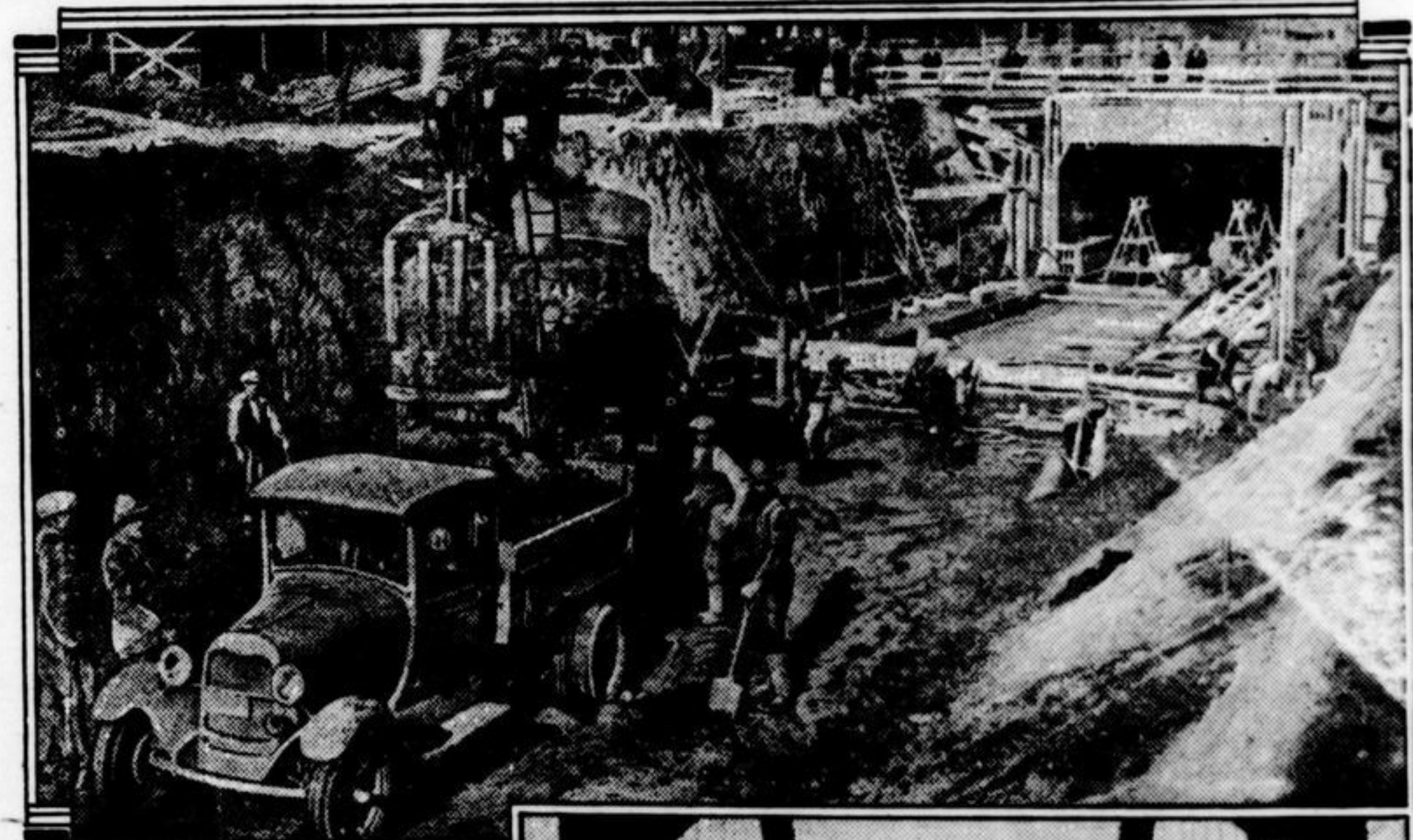
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### Fording the American Boundary Twice



Longest Suspension Bridge In World Opened.

ABOVE and below, the international boundary between Canada and the United States is being spanned where the Detroit River separates Ontario and Michigan.

Already the two-mile Ambassador Bridge is linking the people and interests of the two countries. Following a dedicatory ceremony on Armistice Day, the span was thrown open for public use on November 15. For three years, it will enjoy the distinction of being the longest suspension bridge in the world. By 1933, however, its stretch of 1,850 feet between the two sky-scraping towers will be forced to take second place because of the longer span of the Hudson River bridge linking uptown New York and Jersey. Until the building of the Ambassador bridge, world distinction for the longest suspension span was enjoyed by the Philadelphia-Camden bridge over the Delaware River, its suspended length being 1,760 feet.

In the meantime, dredging and excavating are being rushed on the Windsor-Detroit tunnel. It is expected that, before another year has passed, this international thoroughfare also can be in use.

An example of the manner in which this work is being expedited is given by the record accomplished by Ford trucks in removing 40,000 cubic yards of wet clay from the Windsor entrance in the short pe-



Below—Curve of the huge span of Ambassador Bridge, opened between Windsor and Detroit November 15, is shown by the lower level of the further cable tower, visible through the rear window of the Ford sedan. Above—Work on Windsor-Detroit tunnel is being speeded since opening of international bridge. Photo shows truck removing clay from Windsor entrance.

ried of two weeks. This record achievement required that the trucks make 85 round trips daily, a distance of three miles each trip with a load of two yards of wet clay.

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