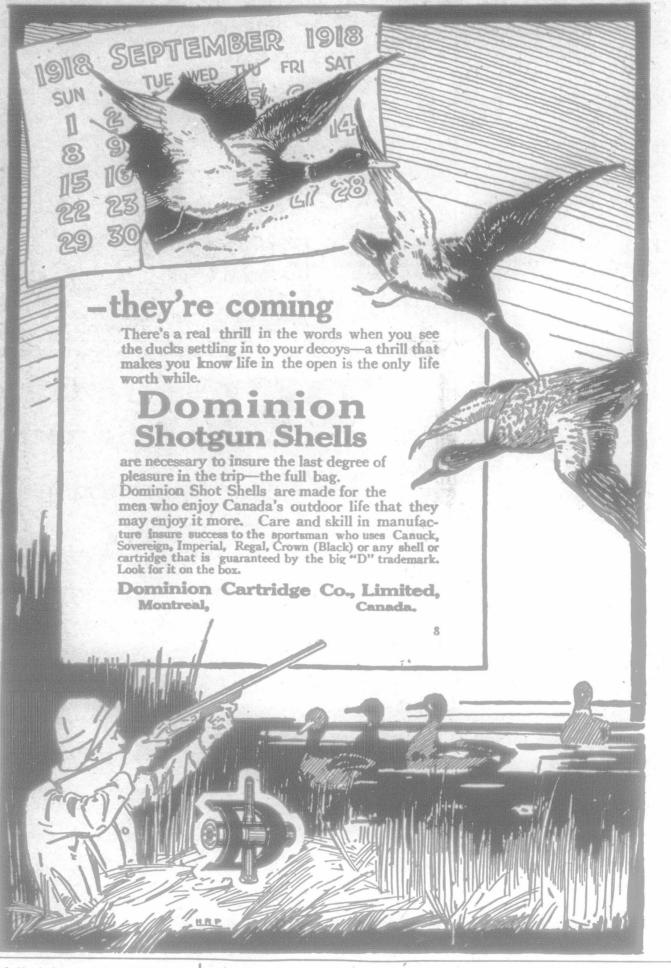
THE FARMER'S ADVOCATE.



Newcastle Herd of Tamworths and Shorthorns Boars ready for service. Some bred and ready to breed; 2 splendid sows carrying their 2nd and 3rd litters. Boars and sows not akin, ready to wean. Meetly descendants of Colwill's Choice, 3-year champion at Toronto Industrial, and imp. Cholder-ton Galden Secret. A few nice Shorthora heifers in calf, deep-milking strain. Young cows with calves at foot Long-distance 'phone.

A. A. COLWILL, Proprietor, R.R. No. 2, Newcastle, Oni.

ELMHURST LARGE ENGLISH BERKSHIRES From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed. H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO Langford Station on Brantford and Hamilton Radial

A choice lot of **Poland China and Chester White** swipe, bred from winning stock. Pairs not akin Prices easy. Geo. G. Gould, R.R. 4, Essex, Ont

FOUNDED 1866

whether it is working properly while in operation. Every part of the machine was put there by the manufacturer to serve some definite purpose, and a threshserve some dennite purpose, and a thresh-erman cannot expect to keep his machine running at its greatest efficiency unless he knows these things. He should read carefully all catalogues, instruction books and other literature furnished by the company; go over his machine with them in hand, to find out just what they measure in hand, to find out just what they mean, and keep them where they will be accessible unless he is absolutely sure that he knows everything that they contain.

Manufacturers spend years in designing, building and experimenting with their machines, and their catalogues and in-struction books contain such information as applies to the particular machine which they account the articular the second s they accompany. A great deal of the trouble which threshermen experience is due to the fact that they do not run their machines according to the printed instructions, and in many cases where an expert is called it is found that the operator is either not acquainted with the instructions furnished by the manufacturers or has disregarded them, because he thought he knew more about the machine than did the man who built it.

If the grain is to be threshed rapidly and waste reduced to a minimum, it is essential that the engine should have sufficient power and the belt pulley be of sufficient power and the belt pulley be of the right size to run the separator at the proper speed at all times. The speed in revolutions per minute at which the cylinder should run is invariably stated by the manufacturer in the instructions accompanying the machine and is often stamped on the machine itself. A variation of more than a few per cent. either above or below this stated speed is sufficient to impair seriously the effi-ciency of the entire machine. ciency of the entire machine.

Since this is so important, the thresher-man should be sure that his engine will not only develop sufficient power to drive the machine at the proper speed with the ordinary load, but that it also has enough reserve power to maintain normal speed for a few seconds under a heavy load. Even with the most careful feeding, oc-casional choking will occur, and, if the engine cannot maintain its regular speed with a slight overload, more or less loss cf grain will be unavoidable.

When the speed is diminished, the movement of grain and straw through the machine is slackened, the straw-rack is overloaded, and the grain pan fills up. When the proper speed is resumed, the mass of straw on the rack will go through the machine without being spread out sufficiently to allow all the kernels to fall through the grain pan and conveyor. When the mass of grain and chaff which has accumulated is thrown upon the sieves, it has a tendency to choke them, partially at least, and interrupt the blast.

The operator should not guess at the speed of the machine, for a variation of five per cent. may reduce its efficiency. The only way to determine the speed satisfactorily as closely as this is to use a speed indicator. If a speed indicator was not furnished with the machine, a good one can be purchased for \$2.00 or less. One of these will last for years, and will another the theorem to determine will enable the thresherman to determine at any time the speed at which his machine is running.

Since the rest of the machine is driven from the cylinder, unless there is consider-able slippage of the belts, the entire machine will be running at the correct speed when the cylinder speed is right. Hence, the first thing to determine when trouble levelops is the speed at which the cylinder



is revolving. Even though it is known that the engine should develop the proper speed and that the belt pulleys are of the proper size to give the cylinder the correct speed, slippage of the main drive belt or an unnoticed reduction in the speed of the engine, or a combination of both, may reduce the cylinder speed too much. for good threshing. H. R. TOLLEY,

U. S. Department of Agriculture.

For three successive nights New-pop had walked the floor with the baby. On the fourth night he became desperate

and bought a bottle of soothing syrup. "Why, James," exclaimed his wife when she saw the bottle, "what did you buy that for? Don't you know it is very dangerous to give a child anything like that?"

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"Don't worry," was her husband's reply. "It isn't for the baby."