ted. Soap and water clysters should be given every half-hour to hasten the evacuation of the bowels; the belly should be diligently hand-rubbed, and a well-littered loose box provided where the suffering beast may have the luxury of safely rolling about. Some of the old-fashioned practitioners were wont to order their colicky patients to be kept constantly moving; and if the animal is not seriously griped, a few minutes' walk, or even a trot, may help to expedite the operation of the medicine; but in all bad cases the enforced moving of the horse is positive cruelty. Under similarly trying circumstances we should not ourselves like to be dragged or goaded into moving about.

When colic occurs, as it is apt to do, in long-backed washy horses, subjected to hard, fast work, badly fed, or exposed to bad localities, it is apt to be accompanied or followed by scouring, and purgatives should in such cases be given warily. Under these conditions the ether and ammonia may be administered, without either oil or aloes, in a pint of cold gruel, and the natural action of the bowels promoted by frequent soap and water clysters.

When the colicky symptoms are protracted beyond two or three hours, or the pain is great, twelve or fifteen drops of Fleming's tincture of aconite, or two drachms of the pharmacopœia tincture of aconite should be united with an ounce of chloroform and given in a pint of cold water; if the bowels are sufficiently open an ounce of tar of laudanum with a little more ether, may afterwards be tried. Tobacco smoke clysters may be substituted for those of the soap and water; the belly should be well stuped for an hour or two with very hot water, and then covered with mustard paste well rubbed in. When the pulse continues steadily to rise, the patient is feverish, and the pain continues with little intermission, inflammation of the bowels may be suspected, and in such cases stimulants should be withheld.

For several days after an attack of colic, the horse should be sparingly fed on soft digestible food; his corn, in half the usual amount, should be given bruised and soaked, and his work should only be of the lightest possible description. If the bowels are not freely opened, a small dose of aloes may likewise prove serviceable.—*North British Agriculturist.*

DIFFICULT PARTURITION IN COWS.—A subscriber makes the following statement and enquiry:—"In this, as well as in the neighboring Townships, a great many cows have died this spring under the following singular circumstances. When the time arrives that the cows should calve, there is no vent in the womb to allow the calf to pass, only a small vent about the size of the neck of a common quart bottle, surrounded with a strong gristle. In some cases the vent has been torn open with the fingers, in some it has been cut, while in others it has been forced open with a wooden pin, but in every instance the cows have died. Now, can you or some of your correspondents inform me through THE CANADA FARMER if the obstruction is a special disease of the womb, or the effects of some other disease? The cows to all appearance are in perfect health up to the time of calving Do you know of any treatment that would be more likely to save the cow's life than that I have described? Any information on the above subject will much oblige many others besides the writer."

ANS.—It is not an uncommon occurrence in cows that the os uteri, or opening into the womb, is not dilated at the commencement of calving; and injury is often done by attempting to force the opening. Force should never be used unless the animal is in great pain, and then only by a competent and practised hand, for the opening will nearly always become sufficiently dilated in a short time, and parturition will follow without any difficulty. In some instances it may be found beneficial to inject the womb with a little tepid water. Violent interference with the process of parturition, by inexperienced and unskilled operators, is in almost all cases a dangerous and barbarous proceeding.

The Apiary.

Medium Hives vs. large Hives, for the production of surplus Honey.

To the Editor of THE CANADA FARMER:

SIR,—It is thought by some that the object of bee-keeping should determine the size of the hive; that is, if the object be to increase swarms, small hives should be used, but if to obtain surplus honey large hives should be used. This opinion is supported by certain German apiarians, as may be seen from a quotation from the *American Bee Journal*, made by "Briar" in the CANADA FARMER, of March 15. German authority upon many points in apiarian science is of the highest standard, yet still with them, as a people, there is a great amount of superstition, of which it is hard to rid them. It is owing to this, I fancy, that some of them still advocate large hives for the production of surplus honey. American bee-keepers have long since found that it is strong *stocks*—large swarms, and not large hives, that produce large amounts of surplus honey. It is a mistaken notion that a large barn of a hive will contain a correspondingly large number of bees. If such hives were examined after they became filled with combs, the breeding space would be found no larger than in hives of much smaller dimensions. But it may appear to some that there would be more room for the bees, therefore they would not swarm, but increase in numbers until the colony becomes very numerous. But it should be understood that *room* to a bee is a place to work in—a place to store honey, which is no more to be found in a large hive, once filled, than in a medium one, hence in either case they will swarm unless more space is given to them where they can store honey. It is also found that swarms cast from large hives are generally no larger than those cast from a medium hive, which is good evidence that the colony is no larger. What advantage, then, have the same number of bees in a large hive in producing surplus honey? They may have more honey in the hive, but such honey is not marketable; and while they were placing it in the body of the hive, they might have put it in boxes suitable for market, had the hive been smaller. For illustration let us suppose that A and B are neighbors, and both commence bee-keeping at the same time this coming spring, their object being the production of honey. A buys a swarm and puts it into a medium sized hive, containing say 2,000 inches; B buys a swarm and puts it into a large hive containing 5,000 inches. In neither hive is the queen limited for breeding space. Now what will be the results in two or more years, allowing that their bees do well? In ten to fifteen days after the swarms are put into the hives, A's swarm has filled the body of the hive, and commenced to fill a box which will hold 20 lbs. B's swarm has not yet filled the body of the hive half full; however, like A's swarm, it has built sufficient comb for breeding purposes, and commenced to store surplus honey in the body of the hive, where they have room for storing 100 lbs. In ten days A's swarm has filled the box, and it is removed and a second box put on, which they at once commence to fill. B's swarm, of course, has stored a like amount, 20 lbs., but it is in the body of the hive; ten days more, and the honey harvest is over. A's swarm has filled the second box, which is removed, making altogether 40 lbs surplus honey, which at 25 cents amounts to $10.00. B's swarm has deposited the same, but as it is necessary that the body of the hive be filled, it is not available. At the end of the first year, A has received 40 lbs of honey, or $10. B has realized nothing. The stocks are now put into winter quarters under the following conditions. A's stock has a store of honey for winter use, say 40 lbs. B's stock has a like amount, and 40 lbs. extra, not required, and empty space in the hive sufficient to hold 60 lbs. more. During the winter 20 lbs each is consumed. Spring opens with a good honey harvest, and the results will be as follows. A's stock will fill a box of 20 lbs. and cast a swarm which will fill another hive, and make 40 lbs more of surplus honey. B's stock will fill the hive, but having had sufficient room to work, will not swarm. At the end of the second year A will have received 100 lbs. surplus honey, worth $25, and will have two stocks of bees. B will have but one stock of bees, and no surplus honey. True, his hive will contain about 100 lbs. of honey, which if in a movable comb hive might be removed, but it would be unfit for market. It may, however, be supposed by some that as B's stock has not swarmed it must contain a very large quantity of bees, and having an abundance of honey in the hive, will be prepared the third year to produce more honey, by far, than both of A's stocks. Such, however, is not the case. If the stocks be examined in the spring of the third year, it will be found that B's large hive will contain but few if any more bees than either of A's hives. The reason is this: a queen cannot raise her colony above a certain number, varying from sixty to eighty thousand, according to the prolificness of the queen. But allowing that B's stock is somewhat larger, and produces 25 lbs. of honey the third year, and casts a swarm which produces 40 lbs. of honey; A's stocks will each produce 20 lbs. and cast a swarm, which swarms will produce 40 lbs. each, making the results of the third year stand thus: A, 120 lbs of honey and two swarms. B, 60 lbs. of honey and one swarm. The results for the three years would be, that A receives 220 lbs of surplus honey, worth $55, and three swarms of bees. B receives 60 lbs. of honey, worth $15, and one swarm of bees; making the profit of a medium hive over a large one in three years amount to 160 lbs. of honey or $40, and two swarms of bees. If any person doubts the correctness of the above calculation, let him try the experiment and he will then be convinced of its truthfulness.

J. H. THOMAS.

How to Introduce Italian Queen Bees.

To the Editor of THE CANADA FARMER:

SIR,—I have just received No. 9 of the *Rural American*, and I find an article by the Editor, under the above heading, in which he evidently shows that he does not understand the subject, for he goes on to say that there are many Italian queens sold at the present time by men who make a business of rearing them; that they are sent to purchasers by express, in very small wire cages, supplied with honey to feed on; and that the introduction of such a queen to a family of common bees produces a hybrid bee, half Italian and half native, but that exact relationship can only be maintained for one year; after which the cross assumes a different degree one way or the other, for the subsequent breeding will be by the hybrid queen, the original one having, as is customary, gone off with a first swarm. Now, there are many parties intending to introduce Italian queens during the coming season, who by reading the article referred to, and not fully understanding the subject themselves, may come to the conclusion to abandon their intention from the fear of getting, instead of a pure stock of Italians, only a hybrid stock; and as many bee keepers in Canada do not understand how it is that introducing an Italian queen to a stock of common bees will in a few months make it a pure stock of Italians, I will give a few facts in regard to the matter that may be interesting to such persons, and perhaps prevent them forming wrong conclusions when reading articles like the one under the above heading in the *Rural*. In the first place, those intending to introduce Italian queens should purchase queens that are warranted to have met with Italian drones. Then let it be understood that if you introduce such a queen to a stock of common bees, she will produce *pure Italians only*, (and not half Italians and half common, as stated in the article in the *Rural*); and the reason why the common stock with the Italian queen soon becomes all Italians, is because your bees are constantly being destroyed in various ways, and dying off with old age, and the young Italians are filling their places; and before you are aware of it you have a nice pure stock of Italians, without a common bee among them; and when your Italian queen leaves the hive with a swarm, it is to build up another pure stock; for every egg that she lays during her life will, with proper treatment, produce a pure bee; and the young queen that is raised to fill the place of the one that has gone with the swarm will be pure also; for she will be raised from an egg of the old queen that has gone with the swarm. If, however, she meets with a common drone, then her brood will be hybrid, or half Italians and half common bees; but if she meets with a pure drone, then her breed will be pure for life.

H. M. THOMAS.

BROOKLIN, C. W., May 7th, 1867.

Bee-Keeping Prospects.

So far everything bids fair for a good bee season the present year. The weather remaining cold fruit blossoms have not put forth until the season is so late that we shall not likely have much more cold weather; hence, breeding that has already commenced in good earnest will likely continue without interruption until white clover appears, and swarms be cast early. Old hives should be scalded and well cleaned, new hives made or purchased at once, and no time lost in preparing for early swarms, especially from such stocks as have been wintered in-doors and otherwise properly attended to.

☞ Messrs. Charles Dawbarn & Co., 121 King Street, Toronto, are agents for J. H. Thomas's First Prize Moveable-Comb Hives for Toronto.

☞ Postage stamps may be sent in payment for the "Canadian Bee-Keeper's Guide," either to this office or to the author.