

or six places at a time. The animal requires to be kept warm during this course, which on that account may be preferable in the warmer seasons of the year. I have seen this course tried several times, and have never known it to fall short of the desired effect."

Veterinary Surgical Operation.

A London (Ontario) paper gives the following account of a remarkable accident and successful surgical treatment, which reflects much credit on the skill of the surgeon, Mr. J. H. Wilson, who last year passed a very successful examination, and received his diploma from the Toronto Veterinary College. Our contemporary says:—

"A remarkable case of veterinary surgery came under our notice a short time ago, resulting contrary to our expectations. The facts are as follows: A team belonging to W. R. Hodgins, of the 16th concession, London, got frightened at some object, and became entirely unmanageable. They ran furiously towards a barn, situated a short distance from where he was using them, and while running through the orchard, which is between the barn and the place of work, the rear horse was thrown violently against a large apple tree, the concussion being so great as to fracture the right parietal bone, forcing the same downwards, and overlapping the frontal bone. On examination, it was found that the *dura mater* had been penetrated by particles of spicula, the *arachnoid* and *pia mater* (membranes covering the brain) escaping injury, and pieces of the wood and bark were extracted carefully by the surgeon, and the broken sections of the parietal bone were so adjusted as to cause little or no irritation of the brain. Great credit is due the veterinary surgeon, J. H. Wilson, of the village of St. John, who performed the operation, and saved the life of a valuable animal. This extraordinary operation ought to establish in the minds of the people of this Province the great use and necessity of proper education for those who profess the art of healing horses. Such an Institute is now in Toronto, providing the means, where the veterinary art is taught with great success."

GREASE IN HORSES.—A correspondent from Kelso, Quebec, wishes to learn what is a good remedy for this complaint in horses. Grease in an inveterate form is difficult to cure. In the treatment of all cases strict attention must be paid to cleanliness, and if the irritation is great, apply poultices of linseed meal for a few days, to which may be added a little yeast. The horse should undergo a course of medicine. A drachm of the iodide of potassium may be given once a day, until twelve doses are given. Any mild astringent applied externally will also be beneficial in hastening on the healing process. As we have before mentioned, in all bad cases it is well to call in the services of a qualified veterinary surgeon.

Apiary.

Impregnation of Queens—A Wonderful Discovery.

Intelligent bee-keepers have long understood that the queen bee is impregnated on the wing, that about the fifth day after she is hatched she takes her bridal tour to meet the drones in the air. And however desirable it may have been to control this matter, as we do that of cattle, this fact seemed to preclude all possibility of its ever being done. But since the introduction of Italian bees the minds of bee-keepers have been turned in that direction, in order to discover, if possible, some method whereby the impregnation of the queen could be controlled—some plan that would enable the bee-keeper to cause the queen to be fertilized by such drones as he might select.

It was seen that the advantages arising from such a discovery would be great indeed. There would be no difficulty in keeping Italians pure. Large apiaries could be Italianized in one season from one queen. There would be no loss of queens by going out to meet the drones in the air, as is frequently the case now. For a long time, however, there appeared no probability of such a discovery. Many methods were suggested and tried, only to prove failures. Much to the surprise of many, therefore, it was stated in the *American Bee Journal*, No. 9, for March, 1868, that Mr. Kohler had announced in the *Bienenzeitung*, a German paper, that he had discovered a process to prevent Italian queens from having concourse with common drones, and securing their fertilization by Italian drones exclusively. But as Mr. Kohler was poor and had a large family to support, he was advised to keep the process a secret until assured of compensation for his discovery. It was soon arranged, and eminent bee-keepers were appointed both in Germany and England to receive subscriptions for the process, at 10s. 6d. each, sterling. Learning that Mr. Woodbury, a Devonshire bee-keeper, was one appointed to receive subscriptions, I immediately wrote to him, enclosing the amount required. About the same time, I received from Mr. Gray, of Ohio, an extensive queer breeder, a process which he assured me was the Kohler process, he having obtained it through a friend. I immediately forwarded the same to Mr. Woodbury, who wrote to me, saying it was the Kohler process, also returning me the money.

The process was as follows: The stock containing a young queen to be fertilized was to be placed early in the morning in a dark cellar, along with a stock containing the drones with which it was desirable the queen should mate. Late in the afternoon, when all the drones, or nearly all, had ceased to fly, the stocks were to be brought out and placed on their stands, giving each

a teacupful of warm honey. Having been confined through the day, the warm honey would excite them, they would rush out of the hives for a fly, and the queen would be fertilized. Of course, the hive containing the young queen should have no drones in it, unless they are such as you wish the queen to mate with, in which case it would not be necessary to put in another hive containing drones.

As soon, then, as it became known that Mr. Kohler had discovered a process, for which he was to receive a recompense, there appeared in the *Bienenzeitung*, and several other foreign periodicals, full accounts of methods practised by others for securing the same results, which being identical with the Kohler process, Mr. Woodbury and others appointed to receive subscriptions, refused to do so any longer, and returned the money they had already received.

This process, although far in advance of anything heretofore discovered, is not all that is to be desired. It requires the bees to be confined for a day in the very height of the honey harvest, and heavy stocks require time and labour to move them to and from a dark cellar or room. It also requires a large number of drones to ensure fertilization. The queens are still allowed to fly out to meet the drones, and may be lost. I have the pleasure, however, of informing my bee-keeping friends that a process has been discovered by an American lady, who keeps a large apiary, and is a regular contributor to the *American Bee Journal*. By this process all difficulties are removed, and the bee-keeper is enabled to secure the fertilization of a queen by one of four or five drones he may select for that purpose. Though it has cost me some expense and trouble to obtain this process at so early a date after its discovery, yet so soon as I am free from the bonds of secrecy that I am now under, I intend to publish the process for the benefit of my fellow bee-keepers. Though I have never tested it, having but lately obtained it, yet I have full confidence in the veracity of the lady who discovered it. She says that during last season she tested it many times, and not in one instance did the queen fail to become fertilized. I might here say that myself and brother talked over the same plan several times during last season, but through a pressure of business failed to try the experiment. So while we were thinking, our Yankee lady cousin made the discovery, a discovery which must revolutionize the whole system of bee-keeping.

Through the assistance of a friend, she is endeavouring to secure some compensation; therefore I am not at liberty to disclose it. I think, however, she will fail in doing so, for to my certain knowledge, several bee-keepers in the United States are in possession of the secret. I shall, no doubt, be able to publish it in time for next season's operations.

J. H. THOMAS.

Brooklin, Ontario.