

by placing the hives quite in the open, with the entrances facing south-east. They thus secure the earliest rays of light, and the bees are tempted to start work early.

Secondly, high winds cause great loss among the colonies, and it would be advisable when such prevail to keep the bees confined to the hives, unless there are sources for honey-gathering in the immediate vicinity. Unless the supers are on, the bees should on such occasions be fed artificially, so that the work of brood-rearing may not be hindered.

Thirdly, during a honey flow in the early part of the season weak colonies must have all the heat possible conserved by contraction of the brood-chamber and heavy top coverings, so that the largest number of foragers may be released.

Fourthly, as soon as the brood combs are well covered with bees, and the weather fine, the supers should be put on and covered up warmly. A day's delay at the crucial moment may ruin the prospects of a colony for the season, causing swarming and waste of time during the honey flow.

And, finally, the difference between the results secured by these two colonies shows that it is of very great importance that stocks go into winter quarters with abundance of stores, so that the earliest spell of fine weather may be utilised by the queen for pushing the breeding. The honey flow from the fruit and forest trees may be made a considerable source of revenue if colonies are got into strong condition in time to take full advantage of it.

HERBERT MACE.

#### THE VIVISECTION REPORT.

THE Royal Commission on Vivisection published, on February 12, its long-delayed report. Four years have elapsed since the Commissioners ceased to hear evidence: and we are left to guess at the causes of this delay. The report is already out of date: it says not a word about the work of Flexner, the work of Ehrlich, the work of Bruce, since 1908; it says nothing of the latest results of the preventive treatment against rabies and typhoid fever, nor of the latest diphtheria statistics from the hospitals of the Metropolitan Asylums Board.

Still, we can afford to forgive these defects: for the report, happily, is unanimous. There is no minority report. Two of the Commissioners died in the course of the inquiry; the remaining eight all sign the report. Three of them sign it subject to certain reservations, contained in memoranda; but these reservations leave untouched the main outlines of the report. The changes recommended by the Commission are of no profound importance to science, and are all of them within the province of the Home Office. There is none of them that requires the intervention of Parliament; and it is certain that Parliament has graver matters to think of than the exact estimate of experimental physiology and pathology.

The report is rather colourless: that is the price

NO. 2212, VOL. 89]

of unanimity. It deals with certain anti-vivisection statements politely, but there is a politeness which is not to be mistaken for approval. It reviews, quietly, what we all know already—the mighty deeds of the last thirty years, the development of Pasteur's principles, the work of Lister, the magnificent warfare against tropical diseases, and so forth. It devotes attention to the benefits gained by animals from experiments on animals; and to the public recognition of the value of such experiments. It recommends a slight increase of the Inspectorate, a further restriction of experiments under Certificate B, a special restriction of experiments involving the use of curare, that drug so much talked of and so seldom seen, and so forth. It contains some good passages: for instance:—

"We desire to state that the harrowing descriptions and illustrations of operations inflicted on animals, which are fully circulated by post, advertisement, or otherwise, are in many cases calculated to mislead the public, so far as they suggest that the animals in question were not under an anæsthetic. To represent that animals subjected to experiments in this country are wantonly tortured would, in our opinion, be absolutely false."

And again, of certain anti-vivisection witnesses:—

"After careful consideration of the above cases, we have come to the conclusion that the witnesses have either misapprehended\* or inaccurately described the facts of the experiments."

Thus, in spite of its colourless, dull style, the report is fairly satisfactory to men of science, and to the public. It comes at a time when the public is concerned with heavy national trouble and peril; and we believe that the public will be glad to leave the whole subject to the experts and to the Home Office.

#### NOTES.

It is officially announced that the King has appointed Sir J. J. Thomson to the Order of Merit. Other men of science who are members of the Order are Lord Rayleigh, Dr. Alfred Russel Wallace, and Sir William Crookes.

WE understand that a portrait bust of the late Sir Joseph Hooker, from a sitting taken just before his death, has now been completed by Mr. Pennachine, the sculptor. A few visitors at Mr. Pennachine's studio, 68 Western Road, Ealing, W., consider it an excellent piece of work.

DR. CHARCOT has been awarded the gold medal of the Paris Geographical Society, in recognition of his work of exploration in south polar regions.

At the anniversary meeting of the Royal Irish Academy on March 16, Prof. Jean Gaston Darboux and Prof. Elias Metchnikoff were elected honorary members of the academy in the section of science.

It is announced that the twentieth "James Forrest" lecture will be delivered at the Institution of Civil Engineers on Friday, April 19, by Mr. H. R.