

same care (which are in same condition in the spring), be more productive than others?" Dr Bond thought the difference was owing to good crosses, or the innate good qualities of some strains of bees, and that such good qualities should be perpetuated by careful breeding. Mr. Forbes said colonies that were in equally good condition in the spring would vary greatly. Remarks were also made by Messrs. Blackmer and Smith. Mr. Blackmer asked which had wintered best, the black or Italian bees? He was answered by E. Smith and G. S. Brown, who were in favor of the black bees. Mr. Isham gave his experience with these two races of bees; had found, the past season, that Italian colonies had given him an average of thirty two pounds of comb honey to the hive more than colonies of black bees, and a corresponding increase in swarms. R. H. Holmes inquired: In what respect do black bees winter best? and was answered: "The Italians die, while the black bees do not." The secretary's experience had been different, the Italian bees wintering better with him than blacks. A recess was then taken until half-past one o'clock.

#### AFTERNOON SESSION

At the opening of the afternoon session, a report from those present was called for by the president, and much interesting information obtained, which is given in the table below. The first three columns of figures give the number of colonies of bees each party had at the different periods named, and the last column give the number of pounds of comb and extracted honey produced:

Names.	Fall of 1882.	Spring of 1883.	Fall of 1883.	Pounds.
H. B. Isham.....	...	10	19	.....
E. P. Wolcott.....	61	60	89	7,000
Dr. Frank Bond...	83	14	21	100
F. B. Sumner.....	65	43	75	3,300
J. I. Clarke.....	47	42	76	3,000
L. C. Thompson..	65	58	150	5,000
Edson Smith.....	67	63	116	4,500
J. D. Brooks.....	85	82	....	5,000
E. L. Moody.....	...	5	16	.....
J. H. Mead.....	25	15	26	1,500
V. V. Blackmer..	60	27	64	3,125
A. P. Needham...	35	15	33	1,000
George Smith.....	65	50	38	4,000
M. Sturdevant....	...	32	65	.....
G. C. Wicker.....	4	3	6	250
G. S. Brown.....	65	37	53	...
V. N. Forbes.....	29	19	38	1,200
R. H. Holmes....	8	4	7	200
J. E. Crane.....	400	300	438	26,500

The president then called upon Mr. F. L. Ripley, of Boston, for his views relative to preparing honey for market. Mr. Ripley read a short paper on this subject, which will be found elsewhere in this department. He was listened to with the deepest interest by all present. During the reading of the paper he was frequently interrupted with questions, which were answered to the satisfaction of all. On motion of Dr. Bond, a unanimous vote of thanks was given Mr. Ripley for his interesting paper, and he was made an honorary member of the association. It was voted to give the ladies present who were interested in the production of honey the privilege of becoming members of the association without paying the usual fee. The topic, "The best way to build up weak colonies in the spring" was then taken up. Mr. Brown stated that he had not been successful in doubling weak colonies in the spring; found it better to take a comb of brood from a strong colony and give to the weak one. Mr. Isham preferred to let the strong ones alone, and take from the weak

ones. Edson Smith said: "I take two medium swarms and then take from them to help up the weak ones." Other members seemed to prefer doubling weak colonies. The next topic was, "How far apart should large apiaries be located?" J. D. Brown said he had "lined" bees for five miles, but lost many of his bees by their crossing Lake Champlain. His apiary is located on the lake shore, and the lake is three-fourths of a mile wide at his place. President Leonard thought large apiaries should be located at least four miles apart. On the topic, "Which is best, a hive with a dead air-space or a chaff-packed hive?" various views were expressed, but the secretary was unable to report them all. President Leonard thought the chaff-packed hives were the best. "What machine is best for making comb foundations?" was the next subject for discussion. H. B. Isham thought the Given press the best; had used, the past season, the Vandervort, Van Deusen, Dunham and Given. He governed the thickness of the sheet by dipping. R. H. Holmes asked if the wax sheets were not thicker on one side than the other if dipped but once? E. L. Moody said: "I dip three times for a heavy foundation." Mr. Beach inquired if foundation was as good after standing for some time? J. I. Clark replied, "When honey is coming in fast, I think it makes no difference." H. B. Isham said it did not matter as much about the age of the wax as the quality of it. J. H. Mead asked what conditions would injure comb foundation. Dr. Bond thought it should be kept from the air, and other members said it should be kept dry. The last topic taken up was, "What advantage have the Cyprian bees over other races?" Mr. Isham thought their strongest points were their stings, and this seemed to be the experience of all who had had anything to do with them. The meeting then adjourned to the second Thursday in January, 1885. The attendance was good, about forty persons being present. Some fine samples of honey were on exhibition, as were also samples of foundation and piece-sections.

J. E. CRANE, Secretary.

#### A MICHIGAN CONVENTION.

##### Wintering the Bees—Honey.

EDS. COUNTRY GENTLEMAN—The Northeastern Michigan Bee-Keepers' Association held its second annual convention, March 5th, at Lapeer—thirty-six members being present. The first topic brought up for discussion was that of Wintering Bees. Mr. August Kloppen said that in a good warm hive bees will winter all right. Mr. Walker said that he is this winter using an outer, removable protective-shell, made of a peculiar kind of building paper, but he considers the kind of winter stores of more importance than anything else. W. F. Card said that bees in old box hives, full of cracks and holes, often winter better than those in well-made and painted movable-comb hives. W. Z. Hutchinson first digs a trench in a sandy hillside, fills it with dry straw, lays fence posts across, places boards over the posts, and then sets the hives in rows upon the boards, surrounding them with straw. Fence posts are then placed over the hives, their upper ends touching like the rafters of a building, straw is thrown over the posts to the depth of a foot, and then earth is shoveled on to the depth of two feet. No opening is left for ventilation. He had been more successful with this method than with any other. He now has 57 colonies in such a "clamp." W. Wray buried two colonies one year, giving them slight ventilation, and they wintered well. He has 54 colonies now in a clamp, with slight ventilation.

C. E. Rulison buried six colonies giving slight ventilation, and only three of them survived the winter, and the combs