

Other well-known methods were given to prevent natural swarming, such as "shaking," dequeening and the like.

R. F. Holtermann, Brantford, Canada, opened the discussion, stating that as a result of the teachings of Dadant and others, and observation when he again began bee-keeping some five years ago, he had adopted a twelve-frame Langstroth hive. The first steps towards swarming were: First drone brood then cell cups. Stocks should be treated to prevent when cell cups were formed, unless the swarming season would shortly close. Several factors besides large hives entered into the prevention of swarming. First enlarge the hive entrance 7-8 of an inch by putting wedges between brood chamber and bottom board, as designed by S. T. Pettit. Next put on supers in time and in these supers have ventilators to give the bees in the supers fresh air. No hive for extracted honey should have less than two available supers. A proportion of super room was required to brood chamber to keep bees content. His ventilator in super was described by Mr. Holtermann.

Dr. C. C. Miller stated that ventilation in supers was very important. He remembered that in the olden days when visiting Adam Grimm, the old German was on a hot day giving ventilation to comb honey boxes stating "that is very important."

Dr. Bohrer stated what would control swarming was large hives. Father Langstroth had used brood chambers 18 or 20 frame size. Bees did not swarm if put in salt barrels.

A. K. Ferris, Madison, Wis., said: use a 14 Langstroth hive and keep working up until the heavy flow, having then as high as thirty frames of brood. I divide the hive into two parts for winter, and winter with two

queens (solid division board between). I put supers on when the honey flow begins, then take both queens away and in a few days give a cell or queen to prevent swarming. I would strongly endorse ventilation. I have had hives five stories high and then a cluster of bees the size of a half bushel outside. I have had the bees fill these five stories in seven days with honey. I have no use for queens more than a year old. I think bees queenless will go in on the supers quicker than when they have a queen.

(Continued next month.)

### THE NEW YEAR.

Swift as a hare, with greyhound Time behind,  
Panting and numb, thro' lashing fears unkind,  
Speeds on each year from snow to cold again,  
Spring to the burst of life 'midst sun and rain,  
Summer to noon with all its wealth galore,  
Autumn to ellyow sear with garnered store;  
Thus ever run the months in ceaseless 'moil  
'Midst every phase of pleasure, grief and toll;  
God be our thought, and justice every deed,  
Love in each heart, then must our Works succeed.

—Newman Harding.

If there is a pitiable sight in the world, it is that of a man with the executive ability, sagacity, and foresight to make a clean fortune, yet using his energies and abilities in making a dirty one—a fortune which denounces and condemns him, and is a perpetual disgrace to himself and his family.—Success Magazine.