

The Apiary.

A. C. ATWOOD - EDITOR.

Response to Enquirer.

The largest works on bee culture are those published by M. Quinby and L. L. Langstroth; they cost about \$1.25 each. They can be procured at almost any bookstore. Millers have never done us twenty-five cents worth of harm since we started bee-keeping, nor yet will they do any other person harm that will keep his bees in proper condition. Queenlessness is the principal cause of stocks being destroyed by millers. Never spend money for miller-proof hives, for almost any hive will be miller proof if a strong stock of bees is kept in it, and it is never allowed to become queenless.

In the spring and summer it is easy to detect a queenless stock by simply examining the combs; if there is no appearance of either eggs or brood, then the stock may be pronounced queenless. In that case, if it is early in the spring, before drones appear, the best way will be to unite the queenless stock with any other hive; but if the loss occurs during the swarming season, a royal cell and worker eggs can be given to the stock, and they will raise a queen. In all cases queenless stocks must be attended to, or the stock is sure to be robbed or eaten up by the millers.

The past has been a very severe winter on bees that have been left on their summer stands, or have been put in improper places. I am glad to be able to say that I believe the unaccountable mortality that has existed among bees for a few years past, is disappearing. For our own part, we never put our bees into winter quarters with as much care as we did last fall, and for our trouble we think we have been well paid, for all our stocks have come to spring in splendid condition, stronger than they sometimes are in May. I wintered them in a repository having a wall of saw-dust ten inches thick; also, over head and under the floor the same thickness, with, of course, ventilators. I prepared my hives by removing the honey-boards, and in their place I put a cushion six inches thick, filled with chaff, and then placed the top cones on this cushion. This had the effect of giving upward ventilation; still it retained the heat in the hive, both of which must be done if we would be successful.

Care of Bees.

The design of my improvement is to furnish a good and cheap means of wintering bees on their summer stands (and of wintering reserve queens,) without sacrificing the convenience of separate hives, for performing the various operations required by the most advanced system of agriculture. It consists of a square box with an entrance for bees in each side, to contain four hives of any description in use. I prefer the Longstroth hives, using the shallow forms with two sets of frames to obtain honey in frames; and the brood chamber of Henry Alley's "New Style Longstroth Hives," (out of which appears in *Bee Journal*, Vol. 5, page 54,) for obtaining box honey. The bottom is made of two thicknesses of pine flooring with a space between filled with any non-conductor of heat. The top is made in the same way, (of thinner material, to make it light,) and shaped like the roof of a house. The walls consist of inch boards lined with several thicknesses of roofing paper or anything else that may be preferred. The house is divided horizontally into two sections of about equal depth. The upper section is on hinges, so as to open like a chest. The seam between the two sections is made air tight with listing or rubber. Openings for ventilation are provided through the floor and the roof. Around the inside, about two inches above the floor, is nailed a narrow strip on which rests boards fitting close to the hives and forming a second floor, which may be permanent or removable, according to convenience. If I used a hive having honey boxes placed on the sides, I would make it removable, otherwise permanent. The object of this is to give free circulation of air round the entrance of the hives but exclude it when desired from the upper chamber till it has passed through the hives and been warmed by the bees. The upper chamber is the most important feature of the house. When the weather is unsuitable for bees to fly, the light boards are made to turn up and close the entrance perfectly tight and dark. Then the warmth arising from four stocks of bees is combined in the upper chamber and retained by proper adjustment of the ventilators, so that no

signs of frost or dampness appear in the coldest weather.

This chamber also furnishes a very convenient place for wintering reserved queens in nucleus stocks if it can be done conveniently, because it saves the trouble and loss of breaking them up in the fall and making them anew in the spring. These boxes may be made with openings in one side, corresponding to the openings in the hives for the honey boxes. When the honey boxes have been removed in the fall, the nucleus boxes can be set in their places, with wire cloth to keep the bees from passing. Thus they will not only have the benefit of the genial warmth of the chamber, to which they will each contribute a share, but they will have a current of warm air direct from the hives. Each house will easily keep in this way sixteen reserve queens, four to a hive; enough probably for all practical purposes. But if the boxes are made eight inches long, seven inches wide, nine or ten inches high, and set two tiers deep, thirty-two can be accommodated.

The dimensions of this bee-house are forty to forty-two inches square and twenty-four to twenty-six inches high, inside measure. It can be furnished with four hives containing ten frames each complete for \$25. This includes a good lock to secure its contents against thieves, the most dangerous foul brood to have to contend with in this State.

Patrons of Husbandry.

New Granges.

The following Granges have been organized since our March issue.

103, Thistle—Alex. Forsyth, Master, Darrell; Geo. Oliver, Secretary, Darrell. 104, Ridge Tree—John Dallas, Master, Wilder Station; Peter McCallum, Secretary, W. S. 105, Sylvan—Alex. Tod, Master, Sylvan; John P. Colton, Secretary, Sylvan. 106, Favorite—James Ferguson, Master, Strathroy; Walter Bull, Secretary, Strathroy. 107, Laskay—John Ireland, Master, Laskay; Daniel Wood, Secretary, Laskay. 108, Central—Andrew Drois, Master, Whitby; Wm. H. Drois, Secretary, Whitby. 109, Merton—N. J. Campbell, Master, Nelson; Geo. McKarlie, Secretary, Nelson. 110, Pride of the West—James Bryans, Master, Kirkton; Robt. Beatty, Secretary, Kirkton. 111, Hope—Alex. Locking Jr., Master, Clifford; Alex. Drummond, Secretary, Clifford. 112, Wm. Anderson, Master, Belmont; David N. Green, Secretary, Belmont. 113, Cedar Spring—Wm. Anderson, Master, Lucknow; M. McDonald, Secretary, Lucknow. 114, Excelsior—G. E. Harris, Master, Ingersoll; Wesley E. Scott, Secretary, Ingersoll. 115, Fairview—N. McCollman, Master, Clarksbury; Arch. Campbell, Secretary, Clarksbury. 116, Enterprise—Andrew Shore, Master, Thornbury; John Atkins, Secretary, Thornbury. 117, N. Dorchester—Simon Wholy, Master, Avon; Edward Hegler, Secretary, Avon. 118, Wilton—James Lewis, Master, Wilton; Jeremiah Snider, Secretary, Wilton. 119, Newport—Alonzo Benedict, Master, Newport; Wilnot Snaishland, Secretary, Brantford. 120, Acaacia—P. S. Vanwagner, Master, Stony Creek; F. M. Carpenter, Secretary, Stony Creek. 121, Gore—Francis Sleightdra, Master, Humber; Wm. Foster, Secretary, Humber. 122, Derry West—Geo. Ratledge, Master, Derry West; Luther Cheque, Secretary, Brampton. 123, Mount Hout—Eli. Crawford, Master, Brampton; James Sinclair, Secretary, Brampton. 124, Dals on—Wm. Heckling, Master, Dalston; Joseph Drury, Secretary, Dalston. 125, Rose Hill—James H. Beynon, Master, Tempunville; James Roger, Secretary, Everley. 126, Minesing—Rich'd. Dixon, Master, Minesing; John Johnston, Secretary, Minesing. 127, Arnrow—John Shier, Master, Arnrow; Benj. Smith, Secretary, Arnrow. 128, Milton—Geo. Browridge, Master, Milton West; Henry Wellnott, Secretary, Milton, west. 129, Treadwell—Wm. Murdock, Master, Chas. Rapley, Secretary, Nappertown. 130, Edmonton—John Cation; Master, Edmonton; John Watson, Secretary, Edmonton. 131, Grimsby—D. Nixon, Master, Grimsby; Jonathan Carpenter, Secretary, Grimsby. 132, Arkona—Stephen Cornell, Master, Arkona; Jacob Wintemute, Secretary, Arkona. 134, Crown Hill—John Darby, Master, Barrie; Thos. Drury jr., Secretary, Barrie. 134, Snowdrop—John Jameson, Master, Lanesville; Joseph Bell, Secretary, Lucknow. 135, Keloin—W. Auld, Master, Warwick; J. Thompson, Secretary, Warwick. 136, Bloomfield—Henry West, Master, Chatham; Francis Dolson, Secretary, Chatham.

137, Metcalfe, Victoria—S. W. Dell, Master, Strathroy; John E. Laughton, Secretary, Strathroy. 138, Burford—B. S. Gage, Master, Mt. Vernon; W. F. Miles, Secretary, Mt. Vernon. 139, True Blue—Jacob Molmer, Master, Sable; Murdock McDonald, Secretary, Sable. 140, Russeldale—John Cole Sr., Master, Russeldale; Rich'd. Gill, Secretary, Russeldale. 141, Knock—S. Connol, Master, Stroud; Wm. Hunter, Secretary, Craigvale. 142, Maple Grove—R. D. Foley, Master, Bowmanville; Richard Foley, Secretary, Bowmanville. 143, Somervale—B. H. Bain, Master, Fullarton. 144, Tottenham—Geo. Nolan, Master, Tottenham; Rob't L. Lowery, Secretary, Tottenham. 145, Nelson—Abraham Stinson, Master, Nelson; David Sinclair, Secretary, Nelson. 146, Painswick—W. H. Newson, Master, Painswick; W. Hunter, Secretary, Painswick. 147, Norfolk—Isaac Austin, Master, Port Dover; D. B. Palmerton, Secretary, Simcoe. 148, Carlisle—Geo. Gartie, Master, Carlisle; Reuben Sparks, Secretary, Carlisle. 149, Mountain—Rich'd. Dick, Master, Chettenham; Arch'd Frank, Secretary, Chettenham. 150, North Western—John S. Leslie, Master, Georgetown; Alex. Stirrat, Secretary, Glen Williams. 151, James Lourie, Master, Charing Cross, Abert H. White, Secretary, Charing Cross. 152, Triumph Union—Wm. Laing, Master, St. Mary's; Wm. Porter, Secretary, St. Mary's. 153, Edgar—Rob't. Richardson, Master, Edgar; Thos. McLeod, Secretary, Dalston. 154, East Whitby—Joseph Langmaid, Master, Taunton; James C. Fox, Secretary, Toley.

High Bred Cattle and Sheep.

The *North British Agriculturist*, Scotland, does not seem to be one of those journals which decry live stock that are high bred and bring great prices, because they are so raised. It says:

"Those high-bred and high-priced Shorthorns which have of late come in for so much abuse at the hands of certain agricultural journalists, cost perhaps too much money, but that can't be helped; but to say that breeding entirely from certain strains is a mistake, is open to question. Take two representative bulls, the Duke of Devonshire's Duchess bull and the Lord Erwen; say nothing about pedigree, the latter may in a sense be the best beast; and there is no man half a judge, not to speak of pedigree, would prefer him to the Duchess bull.

"Lord Polwarth's rams are the Bates of the Border Leicester, sheep. Look what they make every year! There is no man who has done anything in the show-yard in Border Leicesters but has drawn more or less from Lord Polwarth's stock. Are they themselves show yard sheep? Why does a practical hard working farmer give Lord Polwarth 195 guineas for a tup? He could buy one at 20 guineas that would beat him in a show-yard. The latter would beat the former in a show-yard; but the practical farmer knows that his stock would not, and that makes all the difference. It is well known that Lord Polwarth has bred from the best of his own stock for a great number of years. They are close bred, and improve the stock wherever used. If he were to follow the advice of the writers in the *Agricultural Gazette* he would not stick to high-bred ones, but would select thick-fleshed, well-wooled sheep from 'A pains-taking breeder,' and would, I have no doubt, spoil his own flock, and thereby also injure the breed of the Border Leicester throughout the country.

"So it is with Bates and Booth cattle of high descent. The big prices are the very things that keeps the strains pure and helps to fertilize the whole Shorthorn world. There is a certain potency in a small quantity of this high-bred blood—latent it may have been in the original—but when mixed with that of more plebeian origin it finds its way into those thick-fleshed animals which 'pains-taking breeders' like to see."

Mr. Charles G. Boemer, of Vervy, Switzerland County, Indiana, reports the result of microscopic examinations recently made by him to determine whether pork in that locality was affected with trichina. Out of 187 slaughtered hogs examined, 11 were found to be affected. Three of these contained encysted trichina spiralis, and eight various other forms. The parts examined were the ham, shoulder and tenderloin. A magnifying power of from 50 to 100 diameters most distinctly revealed the parasite when present; a higher power cut off the light too much. He also found in the muscles of a rat he examined, trichina indistinguishable with those in the flesh of swine.