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The Apiary,

PUTTING BEES INTO WINTER QUARTERS.

By A. C. Atwood.

LETTER NO. 1.

Many persons form a very false idea of what constitutes winter quarters for bees; they

think any place is better than out of doors, and, acting on that idea, they set them away,

as I have frequently seen them, in such places as the driving house, granary, milk house, wood house, back stoop and a dozen more just such places as we would hang a chunk of b ef, if we wanted to keep it hard frozen all winter. But for bees, such places are worse by all odds

than their summer stands, as I shall prove be

Many will open their eves when reading this, having always heard me recommend puttin bees in winter quarters. Understand me; I am still as much as ever in favor of winter

am still as much as ever in favor of whiter quarters, providing they are really what win-ter quarters ought to be. A winter repository for bees ought to be perfectly dark, quite dry, and away from the influence of fire, so that it will not be hot in the day time or cold at night; it should be where there is no jarring,

hammering or noise; it should be where there is no jarring, hammering or noise; it should have an even temperature, as near 33 degrees as possible, never over 40 degrees as a rule. For those who have not a thermometer I would recommend to

place a cup of water in the hive; the water should just freeze and no more, and it makes

no difference where such a place can be found, that is the place to winter some bees.

In such a place to whiter some bees. In such a place the bees can at all times pass freely over their combs to their stores, and the combs will come out dry in the spring, with the hive full of strong bees, and will at the same time winter with about half the stores

they would consume if wintered out of doors. They must, of course, have upward ventilation.

as, indeed, they ought to have in all cases, ac cording to the strength of the colony. If a

repository cannot be got that will always re-main at 33 degrees, I would rather have it run up to 45 degrees than to get below 30. Bees do not go into a cold dormant state, like snakes

and frogs, as some suppose, for a thermometer thrust into the centre of the cluster will at all

times show, even in the coldest day in winter, a summer temperature. Usually in February the queens begin to lay eggs; these eggs are hatched, the larva fed, caped over, and comes out a perfect bee in 21 days, the same as in summer which proves the control of a day

summer, which proves the contra of a dor-mant state. Hence the necessity of a proper

wintering repository. The objections to wintering in such places

as the driving house, &c., as referred to, are that a thermometer in such a place will show

just about as cold a temperature as it does out of doors on a cold day, and if a fine, sunny day should come, such as we usually have every 12 or 15 days in winter, the bees in the

driving house never feel the good of it. They stand perhaps for five months in a place as cold as can be. The breath of the bees con-denses on the sides of the hive and outside

combs, and they become one mass of ice. The bees on the outside of the cluster get chilled,

and those in the centre are as backward to turn

fore I have done.

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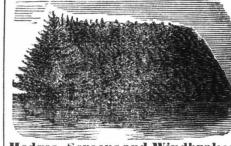
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A committee has been appointed by the legislature of Illinois to investigate into alleg d exorbitant charges for printing the transactions of the Board of Agriculture. Some objections have been made, also to the character of the papers composing the volume, some of which that noted aathority on literary matters, he Chicago *Times*, describes as "unmitigated trash," "literary slush," "worse than useless," "inconsequent lectures by irresponsible mountebanks," and "essays by prolific ignora-muses." 12 to 18 inches-\$10 per 100; \$75 per 1000.

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preliminary labor, and with the most ample re-sources for carrying it on to a successful termina-tion. None of the original stereotyre plates have been used, but every page has been printed on new type, forming in fact a new Cyclopædia, with the same plan and compass as its predecessor, but with a far greater pecuniary expenditure, and with such improvements in its composition as have been sug-gested by loager experience and enl rged know-ledge. The illustrations which are introdu ed for the first time in the present edition, have been added not for the sake of pictorial effect, but to give greater lucidity and force to the explanations in the text. They embrace all branches of science and of natural history, and depict the most famous and remarkable features of scenery, architecture and art, as well as the various processes of me-chanics and manufacturers. Although intended for instruction rather than embellishment, no pains have been spared to insure their artistic excel-lence; the cost of their execution is enormous, and it is believed they will find a welcome reception as an admirable feature of the Cyclopædia, and worthy of its high character

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The gross receipts of the carrying trade between New York and foreign ports amounted during the year just closed to nearly \$60,000-000. Aside from the interest which these statistics in themselves posses, there are several points emphasized by them which are worthy of attention. In the first place, the capital employed in this enormous and enormously profitable business is almost, if not entirely 1-tf NORWAY SPRUCE Suitable for

profitable business is almost, if not entirely European capital. Most of the vessels used in this traffic, it will be seen, are built in the Clyde. All the profits go into foreign pockets. The most trivial details of the service results The most trivial details of the service results in benefit not at all to this country but solely to England, France, and Germany. The ves-sels employed are commanded by Furopeans, sent out from the home offices. Not many years ago forty packed ships sailed out of this port under the American flag. When packed ships came to be superseded by steamships, and the wrofts of occup traffic work immensative

Chicago elevators, on Feb. 3.1 contained 2,491,972 bushels of wheat; 1,862,346 bushels of corn; 681,746 bushels of oats; 62,257 bush-els of rye and 334,063 bushels of barley, mak-ing a total 5,432,387 bushels of all kinds of grain, against 5,731,361 bushels at the same period last year.

the profits of ocean traffic were immensely in-creased, the United States quietly handed over whateve: advantages they might have en-joyed to their countries.

Hedges, Screens and Windbrakes

THE work originally published under the title of THE NEW AMERICAN CYCLOPÆDIA was completed in 1863, since which time the wide circulation which it has attained in all parts of the United States, and the signal developments which have taken place in every branch of science, literature and art. have induced the editors and publishers to submit it to an exact and thorough revision, and to issue a new edition entitled The American Cy-clonardia. clopædia clopædia. Within the last ten years the progress of dis-covery in overy department of knowledge has made a new work of reference an imperative made a new work of reference an imperative want. The movement of political affairs has kept pace with the discoveries of science, and their fruitful application to the industrial and useful arts and the convenience and refinement of social life,— Great wars and consequent revolutions have oc-curred, involving national changes of peculiar moment. The civil war of our own country, which was at its height when the last volume of the old work appeared, has happily been ended, and a new course of commercial and industrial activity has been commenced.

out as I am to turn out of bed these cold The result is that they starve t mornings. death with plenty of stores in the hive, being locked up in ice. Still, notwithstanding this fact, the poor bee

keeper—or rather old fogy, he ought to be called—clears his conscience by saving : "I put them into winter quarters." True, but they proved to be a living tomb. The advantages of wintering on the summer

stands over such places can be easily proven. Bees will stand a great amount of cold if they are relieved every 10 or 12 days by a few hours of warm sun. The sun strikes the hive and of warm sun. The sun strikes the hive and warms it up; the best liven up and warm the combs; they move out and bring a fresh supply of food into the centre of the cluster, and are then ready to stand another siege of cold weather.

If a person has not a proper repository, I would recommend him to leave the bees in their summer stand; leave the honey boxes in eighths of an inch from the board all around, not more, as the mice may get in. Fix it so that you can pack pea straw on the back, two that you can pack pea straw on the back, two sides and top full one foot thick, as tight as it can be packed, leaving the front directly facing the noon sun open, so the sun can strike the hive. Leave all the fly holes open, and in fine days lay wheat straw in front of the hives. Of course the bees will consume more honey than if wintered in a proper re-pository, but they will come out in a different than they would if wintered in the shape than they would if wintered ien th wood house.

Mr. D. Patterson, of Copetown, condemns the Agricultural College and says all the farmers he has spoken to about it consider it a humbug of gigantic proportions.

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