

HABITS OF BROWN ANT

Injurious Little Insect Found in All Cultivated Lands.

Forms Rather Extensive Settlements in Corn Fields, Mainly in Hills—Cultivator Is Not Likely to Tear Up Nests.

(By S. A. FORBES.)

The little brown ant, notorious for its injuries to corn and called, consequently, the corn-field ant, is not by any means limited to corn fields, but is abundant in all cultivated lands, in pastures and meadows, in dense forests, along hard pathways, and in the sandy soil of dry, sunny roads. One sometimes finds it nesting in rotten wood or under bark, logs or stones, and even opening up its underground burrows to the surface between the bricks and sidewalks and pavements. It is distributed "over the whole of North America, except the extreme southern and southwestern portions, from the tree line of the highest mountains to the sands of the shore."

Its home and habits have been chiefly studied in corn fields, and there it forms rather extensive settlements,



Various Stages of Corn-Field Ant.

mainly centering in the hills of corn. Several adjacent hills so occupied by it being connected by underground channels by way of which members of the same family may pass from hill to hill. This is partly, no doubt, because in corn fields it is usually in possession of plant-lice, which live on the roots of corn and which contribute to the support of the ants the fluid surplus of their own food, but partly also because in the corn hills it is undisturbed by the cultivator, which is likely to tear up its nests if they are established between the rows.

In the burrows of this ant one may find a rather mixed and varied population, consisting of the eggs, larvae, pupae, males, females and workers of the ants themselves, together with the various species of root-lice harbored by them and certain kinds of mites which share its underground habitations on terms of mutual toleration, if not active friendship. In clover fields it is very likely to have in its nests many mealy-bugs of a species which infest the roots of the clover plant, and these it treats as it does the root-lice of the corn plant—seizing them and carrying them away when its nest is disturbed, just as it hurries out of sight with its own maggot-like larvae, its egg-like pupae, and its minute, spherical white eggs.

The contents of the nest are not precisely the same at all times of the year. In the winter one finds in it no males or pupae of the ants, as a rule, but only workers and larvae, companion mites and eggs of the root-lice. In some of the larger mites' nests one or more wingless queens or mother ants may be found, although we have not been able to satisfy ourselves that this is true of all, or even most, of the winter communities of this species. A careful search and exploration of all the tunnels and chambers of large nests have often failed to bring to light a single queen. Sometimes, however, two or more queens may be seen living contentedly in the same worker family performing their proper function of laying eggs for the increase of the colony. Besides these large, composite and evidently well established communities one may often find single females in the ground, sometimes wholly alone and sometimes with a few of their own eggs, a few larvae and a small number of workers.

Rates of Seeding.

At the Kentucky station the results of a test of rates of seeding and methods of planting are regarded as indicating that in a very favorable season three stalks per hill will give a higher yield than two stalks, and that drilled corn yields better than corn planted in hills, when the rates of seeding are equal. When the corn was drilled, however, planting 12 inches apart, equivalent to four stalks per hill, gave a still higher yield in 1910.

Age of Usefulness.

The average hen outlives her usefulness in two years, and is more profitably sent to market. There are at times good hens in the third and even the fourth year, but the average limit is two years. Old hens are more likely to contract disease than younger ones.

Benefit of Tills.

A string of till may be the means of producing 90 bushel corn on that old wet spot in the field.

CARING FOR LITTLE CHICKS

Cleanliness Is Important to a Degree of Success or Failure—Furnish Fresh, Clean Water.

In hatching chicks, either with hens or the modern way, the incubator, first of all observe cleanliness everywhere; this is important to a degree of success or failure; filth means the latter always.

Don't feed the chicks at all until they have been hatched twenty-four to thirty-six hours; they don't need it.

Don't feed them any musty, sour or unwholesome feed of any kind, grain or otherwise, as it will cause bowel trouble and death.

Don't lose sight of the drinking water, too; it is just as important that it be furnished fresh and clean and the drinking vessels kept clean.

Don't, if you use a brooder, allow it to get too hot or too cold; either is a fatal mistake. See to it also that the chicks do not overcrowd and trample each other to death; give them plenty of brooder room, they will be more healthy.

Don't place your brood cops or chick runs at or near a wood pile, brush heap, old outhouse, etc., as such places make too good a harbor for rats, polecats and other varmints that will prey on your chicks at the least opportunity.

Don't forget to provide shelter that the chicks can run under at any time, either out of the rain or sun. Many a promising lot of chicks have gone to an early finish through the fact that there was no shelter prepared for them when a heavy shower came up. The same is true of young turkeys.

TASK OF DIGGING POTATOES

Maintained by Some Flavor and Palatability Lost by Washing Clinging Dirt From Tubers.

Where potatoes are very dirty when taken from the field, some growers wash all the soil off them. Others maintain that it ruins their flavor and palatability. They are certainly far more cleaner and more desirable to handle when the hose has been turned on them, and the clinging, hardened dirt washed off.

If the ground is fairly dry when they are dug, and if they are allowed to take the air and the wind for a while, they will usually be clean enough to do without washing. There is every reason for digging them during such weather conditions.

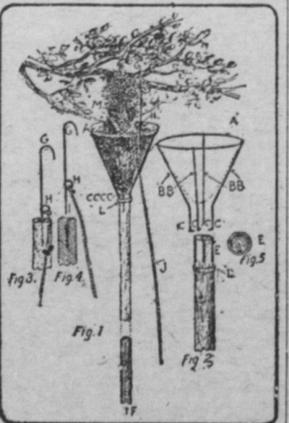
Potato digging should be made a sort of an odd job, one that can be done at any time when there is nothing more pressing to do. The potato crop should be an important one, and any farmer who is forced to buy potatoes for table use should look upon himself as temporarily disgraced.

Enough potatoes are spoiled every year by careless digging to feed a city of the second class for twelve months. Only in communities where the potato is the main and staple crop is there any real care shown in digging and handling this very important food crop.

USEFUL DEVICE FOR APIARY

Plan Illustrated for Capturing Swarms of Bees at Height of Twenty to Thirty Feet.

Gleanings in Bee Culture gives the accompanying plan for reaching swarms at a height of 20 to 30 feet. The hook is placed in the loose hole in one end of the pole, so that by extending this end of the pole up near the swarm, the hook can be easily placed over the limb containing the swarm. The pole is then withdrawn, leaving



A Swarm Catcher.

the hook over the limb with a light rope leading to the ground. By reversing the pole one can now bring the swarm-catcher directly under the cluster, and, by pulling on the rope, shake the bees out into it. Use muslin supported by the wire, as shown, to make the basket for the bees.

Garden Work.

The garden that is properly managed is just now in its prime. Some of the small fruits have come and gone, but many of the vegetables are just at their best, and there are yet at least three crops of sweet corn to be gathered.

Caponizing Best.

Should your chicks turn out to be mostly roosters and not happen to be early to capture the high prices for spring chicks turn them into capons, the price is good and the market is never supplied.

SLUGGER HELPS KEEP PHILLIES IN RACE.



Sherwood Magee, Hard-Hitting Outfielder.

Even if the Phillies do not win the National league pennant this year they have demonstrated that they are a fast and game team. Manager Charley Doolin has some of the heaviest hitters in the league on his roster. Cactus Cravath and Sherwood Magee are the star sluggers of Doolin's club, and have contributed in large measure to keeping the Phillies at the top of the greater part of the season. Sherwood Magee has done some rare execution with the stick, though he has experienced batting slumps at times. His present batting mark is over 300. Magee has long been recognized as among the great hitters of the diamond and has a batting eye that the passing years do not appear to dim.

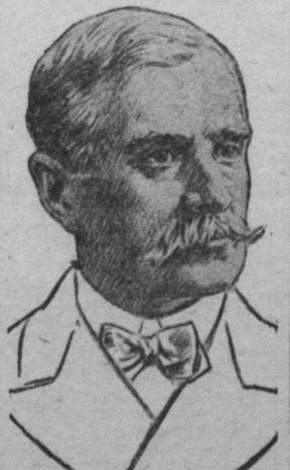
WORLD TOUR GREAT SUCCESS

Japan, Philippines, Australia and France Will Receive Americans With Open Arms.

A warm welcome in foreign lands awaits the Chicago White Sox and the New York Giants, asserts James A. Hart, formerly president of the Chicago Cubs, who returned recently from a trip around the world, traversing part of the route the globe-trotting baseball teams will follow next winter.

He predicts an enthusiastic reception of the baseball players in all those nations which already have shown an interest in the sport, and especially in Japan, the Philippines, Australia and France.

"Manila will give a great welcome to the teams," said Mr. Hart. "So will Australia. If too many games are not played in one city. In Japan baseball is confined mostly to the colleges, though I saw small boys playing the game. It appeals more to the educated classes than the rank and file, however, so the work there will be educational rather than remunerative."



James A. Hart.

There are a number of leagues in Paris where the game has a great vogue and they should draw well. The department of players on and off the field will be most important, as the people in the countries to be visited hardly would understand the quarreling with the umpires and some of the tricks which are here regarded as legitimate."

Slugging Pitcher.
Pitcher Rube Benton of the Reds is getting to be some's hitter.

ALPHABETICAL BALL TEAMS

Interesting Fad of Eastern "Bug" in Selecting Players for Champion "Letter" Club.

The alphabetical craze has caught some of the baseball fans in its meshes, with the result that a number of teams with players all of whose names begin with the same letter have been picked from the two big leagues. A "bug" in the east has picked eight complete teams under this condition, but to do so he has had to shift many players out of their regular positions and used a number of athletes who would not add much strength to any



Catcher Lapp.

good club. A Virginia rooster has chosen four teams, the names of the players beginning with L, M, W and B, respectively. The teams are as follows:

- L.**
Lapp (Philadelphia American).....Catcher
Lange (Chicago American).....Pitcher
Ludurus (Philadelphia National).....
..... First Base
Lajole (Cleveland American).....Second Base
Lord (Chicago American).....Third Base
Laporte (Washington American).....
..... Shortstop
Lobert (Philadelphia National).....Left Field
Lewis (Boston American).....Center Field
Lord (Boston National).....Right Field
- M.**
Wilson (New York National).....Catcher
Wood (Boston American).....Pitcher
Walsh (Philadelphia National).....Pitcher
Wagner (Boston American).....Second Base
Wallace (St. Louis American).....Third Base
Wagner (Pittsburg National).....Shortstop
Wheat (Brooklyn National).....Left Field
Walsh (Philadelphia American).....Center Field
Wilson (Pittsburg National).....Right Field
- W.**
Myers (New York National).....Catcher
Marquard (New York National).....Pitcher
Merkle (New York National).....First Base
Miller (Pittsburg National).....Second Base
Mowrey (St. Louis National).....Third Base
McBride (Washington American).....
..... Shortstop
Magee (Philadelphia National).....Left Field
Milan (Washington American).....Center Field
Marzans (Cincinnati National).....Right Field
- B.**
Brennan (Chicago National).....Catcher
Bender (Philadelphia American).....Pitcher
Byrne (Pittsburgh National).....First Base
Bush (Detroit American).....Second Base
Baker (Philadelphia American).....Shortstop
Baker (Philadelphia American).....
..... Third Base
Bescher (Cincinnati National).....Left Field
Bodie (Chicago American).....Center Field
Bates (Cincinnati National).....Right Field

In glancing over these clubs it seems that the M team has it. That is



Walsh of Philadelphia Nationals.

the strongest and best-balanced team of the four, having a regular infield and a powerful battery. Award the championship to letter M.

Tinker to Evers to Chance.

The managers recruited from the Cub infield are not burning up the baseball world. Evers is having a hard time sticking in first division in the National. Chance with the New York Americans and Tinker leading the Cincinnati Nationals are positive leaders for last place in their different leagues.

TENER APPROVES STATE ROAD ACT

Places All Township Highways Under Control of Department

ADDING 77 NEW ROUTES

Signs Stone Bill Changing System for Managing Diseases of Domestic Animals—Strengthens Work of Live Stock Sanitary Board.

(Special Harrisburg Correspondence.)

Harrisburg.—The bills placing all township highways under supervision of the State Highway Department, adding seventy-seven new highways to the list of main State highways and changing fifteen of the routes in the act of 1911, the most important road legislation after the \$50,000,000 bond issue, were approved by Governor Tener.

The township road bill provides for election of township supervisors for six-year terms and establishes a Bureau of Township Highways in the State Highway Department, the superintendents of road districts getting authority to supervise the work of the township authorities. A system of uniform accounting is also required. The bill for additional main highways covers about fifty counties and provides that the highways shall be taken over June 1, 1915.

Diseased Domestic Animals.

The Governor also approved the Stone bill providing a new system for the control of diseases of domestic animals, a measure which will strengthen the State Live Stock Sanitary Board in its work. It covers all kinds of domestic animals, poultry being included, establishes a basis of remuneration for those whose animals are taken and prescribes new rules.

Other Bills Signed.

Prohibiting working of horses or other animals more than 15 hours in 24 in any first or second class city, under penalty of \$10 to \$50.

Amending State taxation act of June 1, 1909, relative to corporation taxation and reports.

Regulating payments for use of wharves and docks in Philadelphia.

Providing a method by which boroughs may surrender charters and property revert to township jurisdiction.

Fixing terms of directors of the poor in incorporated districts.

Authorizing Orphans' Courts to empower elections in writing of property to be taken under legacies.

Giving officers or policemen for charitable associations power to arrest on view.

Providing for plotting of parks and playgrounds by municipalities.

Providing for payment of costs in arrest and trial of escaped convicts by counties whence they were sent to prison.

Authorizing Department of Forestry to co-operate with local fire patrols.

Regulating taxation of distilleries making denatured alcohol.

Providing for voting machines to be used at elections. The Governor says: "This bill is objectionable for the reason that if such innovation is to become part of the election laws it should be general in its scope and not made optional with the various County Commissioners."

Authorizing attachment of wages and salaries upon judgments obtained for furnishing necessities of life.

Authorizing supervisors to fill vacancies in their boards, the Governor saying he is not convinced that the change is a good one.

Defining statutory offenses, the Governor's objection being the only change made in the existing law is to lengthen the time of punishment if the child is under 14, and to reduce the time if the child is over 14.

Payment of millions of dollars appropriated by the last General Assembly in the general appropriation bill to departments and branches of the State government created since the adoption of the constitution of 1873 will be held up by Auditor General Archibald W. Powell until he is satisfied on two legal questions.—

First, whether they are legally a part of the executive branch of the State government, not having been mentioned in the constitution, which involves the question whether the Legislature can create departments by statute.

Second, what are the ordinary expenses of the executive branch of the State government, which involves the question whether the appropriations for road building, construction and maintenance of tuberculosis sanatoria, maintenance for the State Police force, the funds for establishment of the new public service commission, the \$35,000 emergency appropriation for the Gettysburg semi-centennial celebration and similar items are to be so considered.

Senator Kline Named.

Senator Charles H. Kline, of Pittsburgh, has been named to succeed Senator Henry A. Clark, Erie, on the Emancipation Proclamation Celebration Commission.

Cold Storage Opinion.

The Attorney General's Department has given an opinion that the new cold storage law applies to cold storage plants in hospitals.

Increase of Capital.

The Schmidt and Ault Paper Company, of York, has filed notice of an increase of stock from \$108,000 to \$125,000.