

# Farm and Home.

Copyrighted for 1900 by The Phelps Publishing Co.

PUBLISHED

## SEMI-MONTHLY

(1st and 15th of each month)

BY THE PHELPS PUBLISHING CO.

Entered at postoffice as second-class mail matter. TERMS.—50 cents a year; 25 cents for six months, payable in advance; clubs of two or more, 50c per year. New subscriptions can begin at any time during the year. Sample copies free.

**RENEWALS.**—The date opposite your name on your paper or wrapper shows to what time your subscription is paid. Thus, Jan 10, shows that payment has been received up to January 1, 1900, Feb 10, up to February 1, 1900, and so on. Some time is required after money is received before the date, which answers for a receipt, can be changed.

**DISCONTINUANCES.**—Farm and Home is continued to responsible subscribers until the publishers are notified by letter to discontinue, when payment of all arrears must be made. If you do not wish the paper continued for another year after your subscription has expired, you should then notify us to discontinue it.

**CHANGES.**—Subscribers wishing a change in address must send the old as well as the new address to which they wish the paper sent.

**ADVERTISING RATES.**—Eastern or Western Edition, 50 cents per square line each insertion. Fifth editions, 25 cents per square line each insertion. Discounts for contracts made known on application.

FOR THE CONVENIENCE of its patrons Farm and Home has offices at

77 Worthington St., 204 Chicago St., Springfield, Mass., Chicago, Ill.

Orders for subscriptions, advertisements, and editorial letters can be sent to either office.

**RENEW NOW** If this date—Feb. '00—appears on the little yellow address label bearing your name, which will be found on the wrapper or margin of your paper, your subscription, which, as the date shows, is paid up to February 1, 1900, expires with this (January 15) number.

We hope to receive your renewal, and count upon you to continue with us for the coming year. We want as many of the renewals now as possible, and as an inducement to renew at once we make the following special offer:

If you do not join a club or form one, we will accept your single subscription at the club rate, and send

### FARM AND HOME

A FULL YEAR

FOR ONLY 35 CENTS,

providing it is sent immediately or before February 15, 1900. As a still further inducement we will send to all renewing at once.

### A DICTIONARY FREE

A full description of this Dictionary, which is the best and most comprehensive of its kind and which none should be without, will be found elsewhere in this number.

Now then is the time to renew. Sit down today, fill out the blank which you will find in your paper, if your subscription expires, and send with 35 cents, in postage stamps or otherwise, and receive Farm and Home regularly twice a month for the year to come.

When renewing your subscription be sure to say that it is a renewal, also write your name and initials exactly as they appear on the address label bearing your name. Use the blank which you will find enclosed in your paper and be careful to give the name of the postoffice where you receive your paper.

**SPECIAL PREMIUM OFFERS.**—Should you order premium than the Dictionary in connection with your subscription, we will send any one of the following, which we offer upon remarkably liberal terms, in connection with Farm and Home one year on receipt of the price given against each.

Three Great Books, Atlas of the World, containing 21 colored maps, Comprehensive Dictionary, 50,000 words, and Samanba at Saratoga, the funniest book of the century, postpaid, \$0.50

Unexpected Trouble, an exact reproduction in color of a wonderful \$7.00 oil painting, postpaid, \$0.40

Profits in Poultry contains 232 pages and 151 illustrations, including colored plates, postpaid, \$0.50

Cyclopedia of Useful Information, a most valuable work of 6 volumes, with 1526 pages, 511 illustrations, postpaid, \$0.60

Wood's Natural History contains 600 pages, treating on over 1200 topics, and 600 illustrations, 129 in color, postpaid, \$0.50

The Olympia Watch, an accurate and reliable watch, postpaid, \$1.25

A full description of the above premiums, which are of exceptionally good value, will be found elsewhere in this number, or in our new illustrated Premium List.

Remember, a year's subscription to Farm and Home is included with each premium, and all, remarkable as it may seem, at the very low prices given.

**SPECIAL CLUBBING OFFERS.**—We would call particular attention to our clubbing list which appeared in our last issue, and to our special and remarkably liberal offers with leading papers.

Subscribers to the Youth's Companion will receive the Thanksgiving, Christmas and New Year's double numbers for two years, and the beautiful Twelve Colored Companion Calendar for 1900, including Farm and Home one year, for only \$2.00, provided their subscription is sent at once.

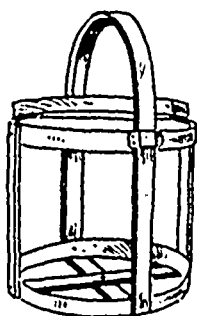
**HOW TO SEND MONEY.**—Amounts less than \$10 can be safely sent by money order, which you can get at any postoffice, and which costs but three cents, or, if more convenient, in postage stamps. Two-cent stamps preferred. Send \$1 or more in bills, by registered letter, postoffice or express money order, check or draft. A two-cent Return stamp should be affixed to all checks and money orders. A money order, or registered letter, costs but a trifle and may be sent at our risk. Make money order, check or draft payable to The Phelps Publishing Co.

Address all orders to FARM AND HOME, Springfield, Mass., or Chicago, Ill.

## Farming That Pays.

### TO PREVENT OAT SMUT.

Millions of dollars are lost annually in several states by the smutting or spoiling of part of the oats. Smut can be almost wholly prevented and at very small cost.



First, get three tubs. Fill each partly full of water, one cold, the other at 110 to 120 degrees and the third at 132 or 133 degrees. Then buy a good, reliable thermometer and make the arrangements to keep the water in the tubs at the degrees of heat specified above. Then make an iron band dipper, as portrayed. Some use an old perforated milk can.

If the seed oats are kept in water at 133 degrees 10 minutes, the smut germs will be killed and the future crop will be comparatively free of the disease. The chief thing to do is to bring every kernel of oats in contact with the water at 133 degrees. If the water gets too hot, add a little cold water of course the dipper of oats will cool it somewhat.

Fill a loose gunny sack, a wire mesh dipper or an old perforated milk can partly full of the seed. As the grain



TREATING OATS FOR SMUT.

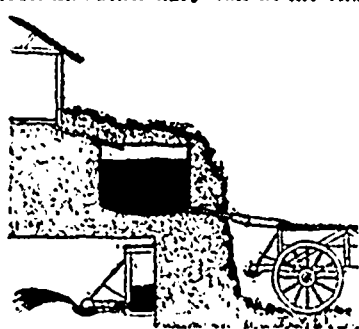
should be agitated in the water hang the handle by a rope. Cover the dipper with fine wire mesh and attach it to the lever edge by strap and buckle. Dip the partly filled sack, dipper or can into the 120-degree water, agitate the grain and keep it there until every kernel has taken the same temperature as the water. Then lift, drain a moment and immerse in the 133-degree water about 10 minutes. Then cool off by dipping in the cold water and then spread on a clean floor to dry or take to the field and broadcast at once. If seed is immersed in water above 133 degrees the germinating powers may be injured. If water is not up to at least 130 degrees, the smut will not be killed.

### SAVING LIQUID FERTILIZERS.

Economy is wealth, in manure as in everything else. To note the change in public sentiment on the saving of liquid manure, which contains more than one-half of the valuable ingredients needed by the soil, is quite encouraging, especially when it is remembered that this progress has all been made in the past few years. How to handle this liquid has been a study with the best farmers, and has been solved generally by the use of large quantities of absorbents, like dried muck, straw or other bedding. But this is expensive economy because these absorbents are bulky, costly because hard to get in abundance, and the vehicle used to absorb the fertility increases the labor of application to the field. The plan of water-tight troughs and cisterns formerly adopted has been abandoned because requiring pumping and straining, or else difficult caused in distribution. But with the rolling land to be found on many farms it is entirely feasible to build a cistern or reservoir in a side hill to which the liquid may be conveyed by pipes or

troughs from the farm drops, and from which it may be let into a water-tight vehicle through a rudo flood-gate or large pipe and faucet by gravity, the wagon standing below the level of the reservoir.

This method will not be made less valuable by clogging in passing the fluid from the cistern to the wagon, because the need of pumps and power is dispensed with. The old-time sprinkler must be abandoned also to have the greatest satisfaction. In its place must be substituted the liquid spreader adopted on most city street sprinkling wagons. It is merely a saucer-shaped vessel and stationary ball at the end of



CISTERN AND SPREADER FOR LIQUID MANURE

a pipe, through which the water flows. On being freed from the pipe it is forced by the ball downward upon the saucer, from which it is spread in a thin sheet regularly over an even area. Straw, sawdust and other refuse pass through. Such a cart is also useful for watering crops in dry weather. The liquid distributor is shown by the lower corner left-hand figure.

### HOW A WINDMILL PAYS.

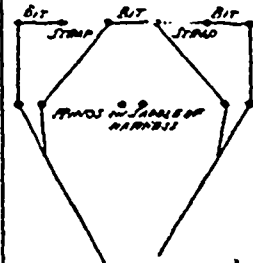
It is sometimes questioned whether the windmill is a practical power. I live on a hill farm three miles from town. Two years ago I bought a 36 ft geared windmill and placed it upon a 70-ft wooden tower strongly anchored. Since then father and I have saved our own wood and ground all of our grain and have been better satisfied with our own grinding than we used to be with that of the village miller. I often grind 1 or 2 bbls of grist while doing chores before breakfast, or while taking my nooning.

Last summer we bought a good second-hand and cleaner and threshed our oats and buckwheat in good shape. I also have a small bone mill which runs by wind power and grinds bones for the hens. The feed mill stands in the corn barn, the threshing and bone mill are upon a scaffold in one of the barns opposite with the windmill between the two buildings.

One advantage of wind power is, the machinery is always in position for work and you have only to oil up and clip on a belt and everything is ready. In the 2 yrs that I have had my windmill it has not cost a cent for repairs, the only expense has been for oil, which is but a trifle. From my own experience I am convinced that the windmill is the cheapest and one of the best of powers.—[Elmer T. Merritt, Windsor Co., Vt.]

### THREE HORSES ABREAST.

I often use three horses abreast and fix the reins as sketched. I put the third horse between the usual team. There is no need to alter the harness in any way. Simply keep two short straps, about 18 in long, with snaps at each end to connect the middle horse with those outside.



The sketch herewith clearly portrays the plan of arranging the reins.—[R. C. Baylies]

**Grading Up Seed Grain.**—The selection of the particular variety of each kind of seed to be sown is a matter of great consequence. One variety of oats may yield from 10 to 20 bu or even a greater quantity than that, more per acre than another variety. If every

farmer would select from the growing grain enough heads from the largest, most vigorous and earliest ripening plants in the crop to make 1 bu of seed, he would have the beginning of a very great improvement and increase in the crop of that kind which he could grow. Such selected bushel of grain might be grown on a particularly well prepared plot; and might thus become the seed grain plot on the farm for that kind of grain. A selection from the largest, most vigorous and early ripening plants should be made each year of every kind of grain. In the course of a few years the crop obtained in that way would be such as to augment the revenue of the farm from the same fields, probably from 25 to 30 per cent. Vigor of life in the plant as well as in the animal is indicated by power to overcome obstacles, power to take possession and power to hold. In the case of plants they take from the soil and atmosphere and hold in organized forms for the farmer.—[Prot J. W. Robertson, Ont.]

**Inquiries for Good Seed.**—The object lessons at the Ont exper farm at Guclph, which have been visited by thousands of farmers each year, are telling this winter in the matter of inquiries for good seed. Farmers learned from the experimental plots that what a man sows so shall he reap, and also that nothing can be expected from poor seed but a poor crop. Fewer split peas, less shrunken wheat, oats and barley will be sown next spring. Farmers who have not first-class seed of their own are hustling among their neighbors to get the right quality, and there will be very little swapping of poor seed to get a change to increase the yield. It is now patent to the dullest intellect that there is nothing made by poor seed changing farms. Even the theory that split peas will produce a big crop if sown in the right phase of the moon, is getting shaky.—[Frank Hunt.]

If the Drain Outlet opens upon the surface of a stream or in such a way



that there is insufficient fall below the mouth, clogging may be prevented by sinking a large, vitrified sewer pipe immediately in front of the opening to act as a silt basin. Less trouble will be experienced in removing sand from this basin than in keeping the ordinary channel clear, the water will flow over the basin leaving its deposit in the bottom. Of course, stock must not be allowed access to the place since they might be injured by falling into the basin.—[M. G. Kains.]

Minchaha Co is enjoying free rural mail delivery for which its Patrons are indebted to F & H in putting us to work as to how to get it. We feel a thousand times thankful. Many do not realize this a government of the people and for the people, and there are many privileges they might enjoy more than they do if they would only ask and work for them, do less finding fault and go to work for what is wanted.—[James Hart, Minchaha Co, S D.]

The circulation of Farm and Home for this issue is **350,400 Copies.** Sworn circulation statements on Farm and Home are sent to advertisers every three months and are made a part of each and every contract.

**WANTED, AGENTS.** We want at least one good agent at every postoffice where we are not at present represented, to solicit subscriptions to FARM AND HOME. This is a rare opportunity for men and women out of employment, and even for enterprising boys and girls who wish to engage in profitable work through the fall and winter months. If you can canvass all of the time or part of the time and would make money easily and quickly, send at once for our new terms to agents and complete premium list, which we send free on request. Address FARM AND HOME, Springfield, Mass., or Chicago, Ill.