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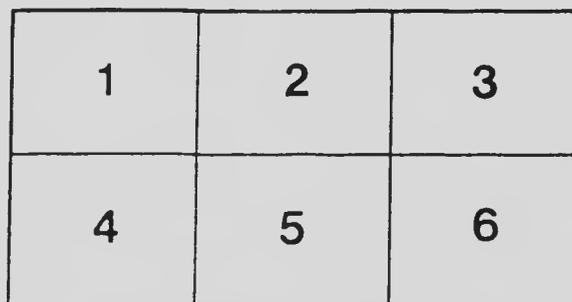
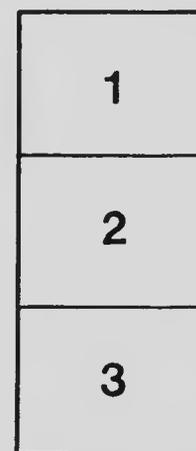
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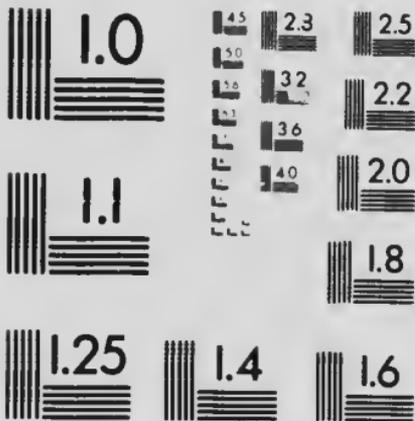
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# MUSHROOM CULTURE

BY

F. L. DRAYTON, Plant Pathologist.



The Common Mushroom

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DOMINION EXPERIMENTAL FARMS.

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## MUSHROOM CULTURE.

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The growing of mushrooms is generally considered to be very difficult, but in reality it is quite easy. Success may be obtained by anyone, provided that there is a suitable place to grow them, and that care is taken in carrying out the instructions given below.

The first consideration is in the choice of a

### Suitable Place to Grow the Mushrooms.

The following places may be used:—

1. A cellar, outbuilding or barn in which the temperature can be kept fairly uniformly between 45° and 65° F.
2. A cave or abandoned mine.
3. Under greenhouse benches.
4. An unheated barn may be used, but in this case the beds would have to be spawned in September, remain frozen all winter and no mushrooms would be obtained until the following spring. This is not the most desirable practice, for it is preferable to have the mushrooms in the winter.

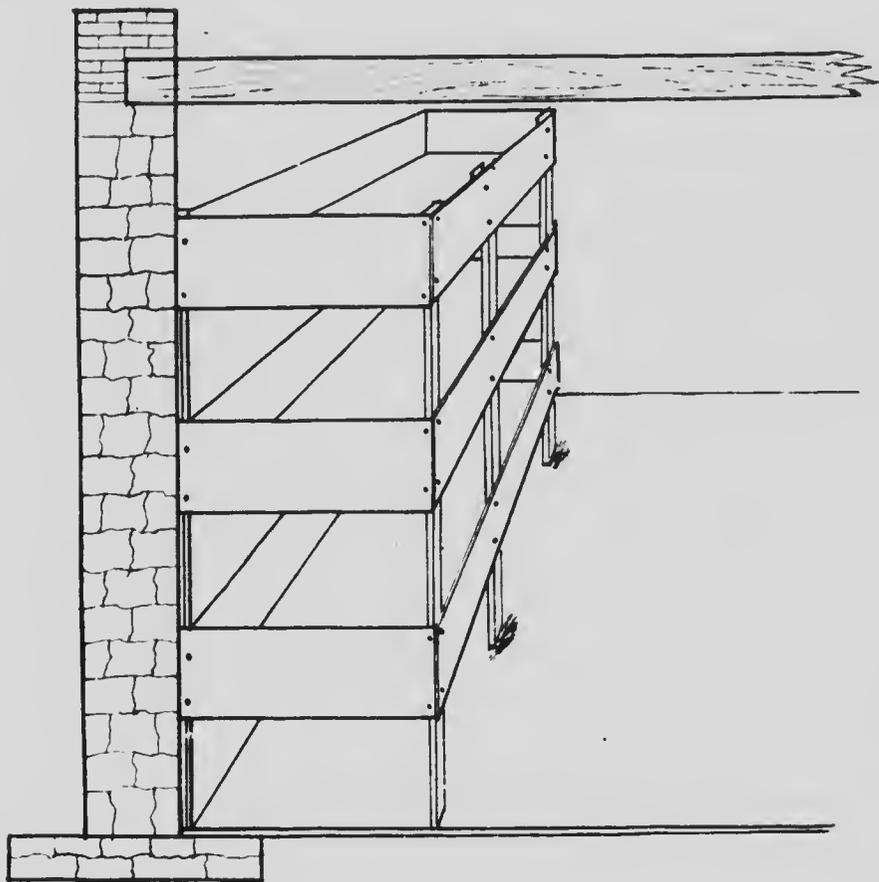
The next step is the

### Preparation of the Manure.

About the end of October, get fresh horse manure where wheat or oat straw has been used for bedding, in sufficient quantity for the size of the bed to be used. Remove as much as possible of the long straw in the manure, place it in a heap sheltered from rain, and keep it from burning by forking over several times at intervals of four to seven days until the first violent heating is over, which will take from three to four weeks. By this time it will have become thoroughly mixed, of a fairly uniform consistency, and will have lost its rank odour. If during the heating of the manure it becomes very dry, sufficient water may be added to make it moist, but not wet. A good way to determine whether the manure is of the correct moistness and consistency is to take up a handful and squeeze it tightly; if, on opening the hand, the manure falls to pieces, it is too dry, or if water is squeezed out, it is too wet, but if it retains its shape without any water being squeezed out it is in perfect condition to use for

### Making the Beds.

The manure may be placed on the floor and ridged up against a wall so that the pile is ten inches in front and sixteen inches at the back; or spread on shelves, like those shown in the accompanying diagram.



These are ten feet long, three feet six inches wide and ten inches deep, with eighteen inches clearance between the bottom of the shelf above and the surface of manure in the shelf below. These measurements may be altered to suit the size and shape of the space available, but the diagram will serve to indicate a structure which is easily made and will give satisfactory results. If the manure is to be placed on the floor, care should be taken that the beds rest upon a thoroughly dry bottom and avoid placing directly on cement. The manure should be compacted with a spade or other tool when the bed is being made.

For the first week or ten days after the bed is made it will heat up considerably. The temperature can be determined by inserting a common glass thermometer into the manure. When the temperature is found to be  $65^{\circ}$  to  $70^{\circ}$  when taken in various parts of the bed, it is then time to begin

### Spawning.

Bricks of spawn can be obtained from any reliable firm dealing in seeds and garden supplies, the price usually varying from 25 to 35 cents per brick. The bricks should be broken into ten or twelve pieces and these pieces should be planted eight to ten inches apart each way in the bed, and half to three-quarters inch deep. This is best done by making a hole on the surface of the manure with a piece of wood, inserting the piece of spawn, covering it over and pressing down the manure on the surface over the spawn.

In about two weeks dig up a piece of the spawn carefully. If a number of white threads are seen to be running out from the spawn like mould, it is then time to spread two to three inches of good loamy soil over the surface of the manure.

### Watering.

No water should be put on the beds after spawning until the mushrooms appear which will be six to eight weeks from the time of spawning. It is very desirable however to keep the air around the beds as moist as possible, this can be done by occasionally sprinkling the walls and floor with water. After the mushrooms begin to appear the beds should be sprinkled very lightly every day or two until the surface is just moist. After that one or two sprinklings a week will be sufficient, according to the condition of the beds. If they get very dry quickly, water oftener.

### A Few Don't's in Growing Mushrooms.

1. Don't use old manure or manure mixed with shavings or sawdust.
2. Don't try to cure the manure too late when frosty weather has become permanent.
3. Don't plant the spawn until temperature of the manure is constant at 65° for three or four days, because the manure will heat up again after the bed is made.
4. Don't over-water; much more damage is done by keeping the bed too wet than too dry. Let the manure be just moist.
5. Don't cover the bed with soil until the spawn has started to make a mould-like growth.



