

He must be about 15 hands high, compact, and strongly built, with fore and hind parts well muscled. He should be short in the back and well coupled. He should have a deep, wide chest, so that the lungs may have full play. His head should be light and his neck carried well up. His limbs should be clean and bony, with somewhat oblique pasterns. Excellent feet and legs are indispensable to stand the battering on hard roads on which he often travels at the rate of 10 to 12 miles an hour. His movements should be quick and springy. He should be good-tempered and easily controlled, so as to be safe under the saddle or in harness. An excellent specimen of the race is seen, at Fig. —, in the mare Wild Rose, which has won several prizes at English horse shows; for at all such shows in Great Britain there is a special class for hackneys. (1)

### Making and preserving permanent meadows.

HENRY STEWART.

Condition of meadow essential before seeding; general method of sowing grass seed; quantity of seed; Orchard Grass; Red Top; Blue Grass; seed for moist ground; seed for damp, rich land; seed for dry, sandy and gravelly soil.

When the land intended for a permanent meadow, or indeed, for any meadow at all, is ready for the seed, it should present a level, smooth surface free from furrows or marks of any kind. When harrow marks are left on the surface, the seed will gather in these and the grass will come up in the lines of them, leaving these too thickly sown, and bare lines between them. This is especially objectionable when Orchard Grass is sown, for the habit of this grass being to grow in bunches, anything tending to increase the affect of this habit is to be avoided.

The sowing is to be done with the object of getting a perfectly even and regular distribution of the seed. This is effected by double-sowing as well as by careful scattering of the seed. It is better to take narrow strips and to be sure to leave no vacant lines between them. It is best to sow heavy and light seed separately, as the heavier seed will be cast further than the light. Moreover, the direction of the wind must be con-

sidered. It is best to sow across the wind. A broadcast seeder is very useful for sowing grass seed; but whether the seed is sowed with a machine or by hand, I would sow it double—one sowing across the other—and the clover seed should be sown alone.

My method is to use the first two fingers and thumb, and take up as much seed as can be held in that way for one cast, and to make a cast at every step. The steps are made by first advancing the left foot an ordinary pace, then bringing up the right foot on the line of the left, and as the right foot is moved to make the cast, throwing the seed up high and with a circular motion of the arm and a twist of the wrist, by which at the end of the cast and just as the seed is let go, the back of the hand is brought uppermost. This throws the seed in a level, broad sheet, which falls evenly from three to four feet on each side of the sower. A cast six feet wide is quite enough to make, and with the quantity of seed taken will use up a peck, or 15 pounds of clover seed and 12 pounds of timothy, to the acre, which is the quantity I prefer to use, thinking some seed in excess is better than having too little. If less is sown, the pinch of seed may be made smaller and less taken at each cast. A very short experience will teach this part of the business to any man who can figure a little.

A cast six feet wide will cover one acre in 2,420 yards, and exactly 11 casts across a 10-acre square field; or 22 casts across a square five-acre field 20 rods wide and long. Each pinch having one-fifteenth part of an ounce, or half a teaspoonfull, will make up precisely 15 pounds of clover seed, (1) and the same bulk at each pinch will expend 12 pounds of timothy.

In sowing Orchard Grass seed, the quantity used is much larger, as two bushels per acre is the least quantity that should be sown. This will give as much as can be taken in a handful with the third and fourth fingers

kept always closed, and the seed grasped between the two first fingers and thumb and the palm of the hand. This will make a full tablespoonful to a cast. Red Top and Blue Grass are sown at the same rate, unless in a mixture with other kinds.

The choice of seed depends upon the kind of soil. Low, moist ground, that is overflowed at any time for a short period,

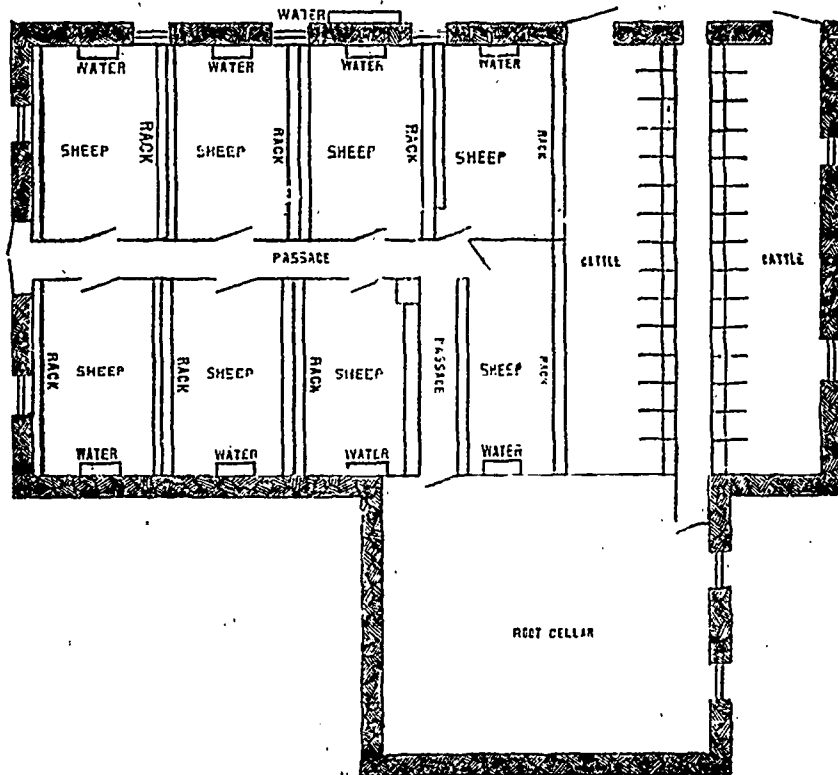


Fig. 366.

(1) The hack is never used in harness, in England. It would spoil him for the saddle, as he would soon learn to lean on to the collar, and become heavy in hand.  
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(1) Seven pounds of clover with timothy is quite enough.

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