To all whom it may concern:

Be it known that I, WILLIAM ERSKINE MOFFATT, a citizen of the United States, residing at Chester, in the county of Chester and State of South Carolina, have invented certain new and useful Improvements in Seed-Planters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form part of this specification.

My invention has relation to cotton, corn, and other grain planters; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a side elevation of the same with a part broken away to show the arrangement of the feeder on the inside of the hopper. Fig. 2 is a top plan view of the frame and covering-board. Figs. 3, 4, 5, and 6 are detail views.

My invention is described as follows: The sides 1, forming the sides of the planter, are sawed out so as to come together at their front ends, and have a piece, 2, of wrought-iron countersunk and bolted between the said sides by bolts and nuts 3 and 4. This piece 2 of wrought-iron is bent up edgewise in the shape of the letter U, as shown in Fig. 1. In the upper part of the bend is a perforation, 5, in which works a lap-ring, 6, for hitching the draft to. The upper part of the bent piece 2 terminates in a threaded end, 7.

The plow-standard 10 is made of a piece of thin iron, and is bent U-shaped, as shown in Fig. 5, leaving a slot or open space between the sides. The sides 11 are passed up through the depressions or slot 12, one on either side of the bent iron 2, and between the bolts 3 and 4. (See Fig. 2.) The upper end of the plow-standard 10 is then passed on either side of the bent bar 2, its front edges resting against the pin 13, secured in said bent bar 2. Then against the rear edges of said standard 10 are secured the washer 8 and nut 9 on the threaded end 7, this holding the said standard firmly against the pin 13. Thus it will be seen that the said standard is adjustable.

To the outer face of each of the sides 1 are bolted flat bars of iron 14, the rear ends of which turn up and form supports for the hopper 15 and handles 16. The hopper 15 is secured between these supports and over the wheel 17. The handles 16 are adjustable—that is, they may be made higher or lower to suit the operator. To the bottom of the hopper 15 is attached a chute, 18. This chute drops the seed in the rear of the wheel 17. It is open on its rear face, so that the operator can see whether the seed is being regularly dropped or not, thus making my planter a sight-feeder.

Near the bottom of the hopper 15 is journaled a shaft, 19, on which is secured a hollow cylinder, 20, having the hub 30 and thumb-screw 31. From the periphery of this cylinder 20 extend bent arms or rubbers 21, which are set on said cylinder in a leaning-back position—that is, the points of the arms are much in rear of their butts. The points of these arms or rubbers cut away and rub off from the seeds any lint that may be on them, and force them down through the opening 22 as they pass over it, thus making my machine a force-feeder as well as a sight-feeder.

The shaft 19 may be rotated by crank-arms, which may extend from both ends of the same and be connected by means of pitmen and crank-arms with the axle of the wheel 17 in the ordinary way; or it may be rotated by any other suitable device.

The covering-board 23 is attached to spring-arms 24, the front ends of which are attached to the lower face of the blocks 25, which blocks are attached to the lower face of the sides 1. Thus these spring-arms are long enough to allow sufficient rise and fall to the covering-board to enable the wheel 17 to pass over uneven ground without being lifted from the earth by the said covering-board and plow.

When I wish to change my machine from a driller to a hiller, I remove the cylinder 20 from the shaft 19 and put on said shaft one of the solid cylinders or wheels 26 or 27. Figs. 3 and 4. The cylinder or wheel 26 is for dropping cotton-seed in hills, and has three or more open mouths, 28, cut in its periphery, which are inclined forward in the direction in which said cylinder rotates, which enables them better to take up the seed as the cylinder revolves, and as each mouth passes into the mouth 22.
in the bottom of the hopper 15 the seed drop out. Cylinder 27 is for planting corn, peas, &c., and is provided with cups 29 in its periphery, which take up the seed and drop them in the manner above described. Separate cylinders may be made having their mouths and cups nearer to or farther from each other, to drop the seed farther apart or nearer together. The peripheries of these cylinders 26 and 27 and the thickness of the same are made to exactly conform to the arc of the opening in the bottom of the hopper 15 and to the width of the hopper at that point, the object of which is manifest.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a seed-planter, as above described, the combination of the sides, the U-shaped bearing 2, one end bolted between the front ends of said sides, leaving on either side of bar 2 slots 12, slotted standard 10, each half passing on either side of the bar 2, through the slots 12, and between the bolts 3 and 4, their front edges resting against the pin 13, the washer 8, resting against the rear edge of the said standard, and threaded nut 9, working on the threaded neck 7 of the bent bar 2, substantially as shown and described.

2. In a seed-planter, as above described, the combination of the side pieces, 1, having the depressions 12, wheel 17, journaled to the lower face of the sides by blocks 25, springs 24, bearing covering-board 23 and secured to the lower face of the blocks 25, U-shaped bar 35, its lower end bolted between the front ends of sides 1, U-shaped standard 10, each half passing on either side of bar 2 and through slots 12, its front edges resting against the pin 13, washer 8, and nut 9, working against the rear edges of the same, substantially as shown and described, and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM ERSKINE MOFFATT.

Witnesses:

Geo. W. Gage,
J. K. Henry.