

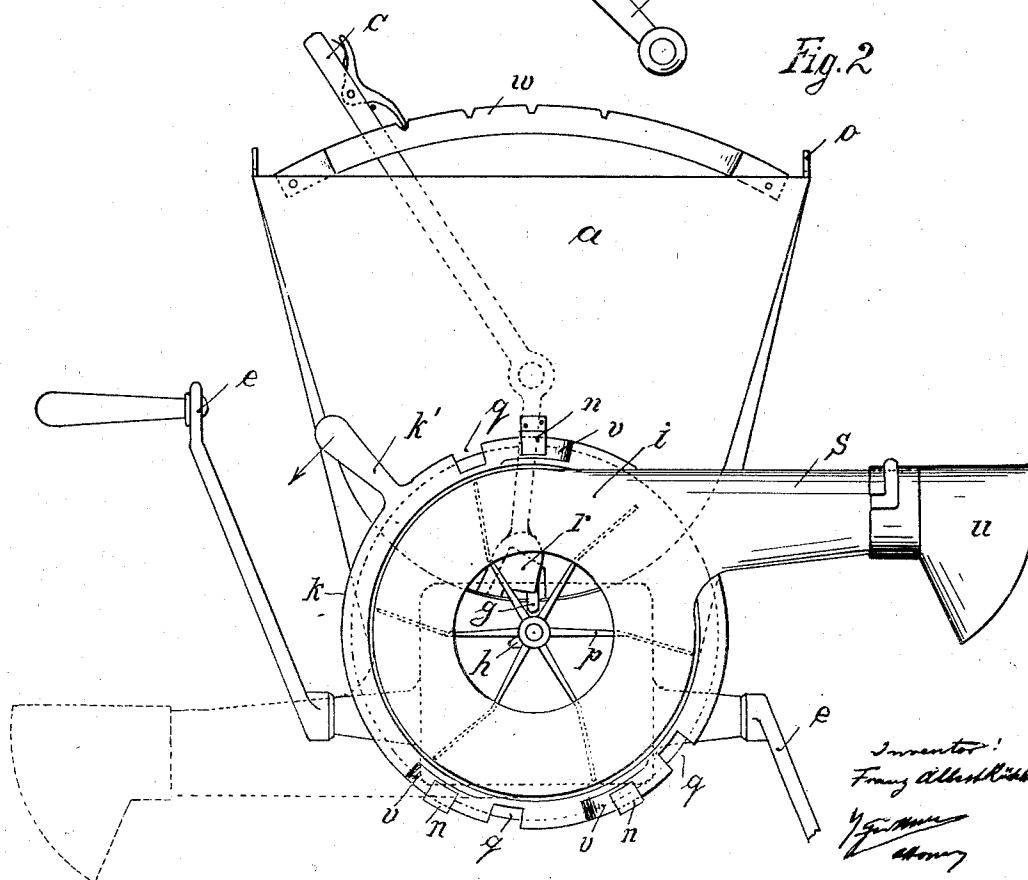
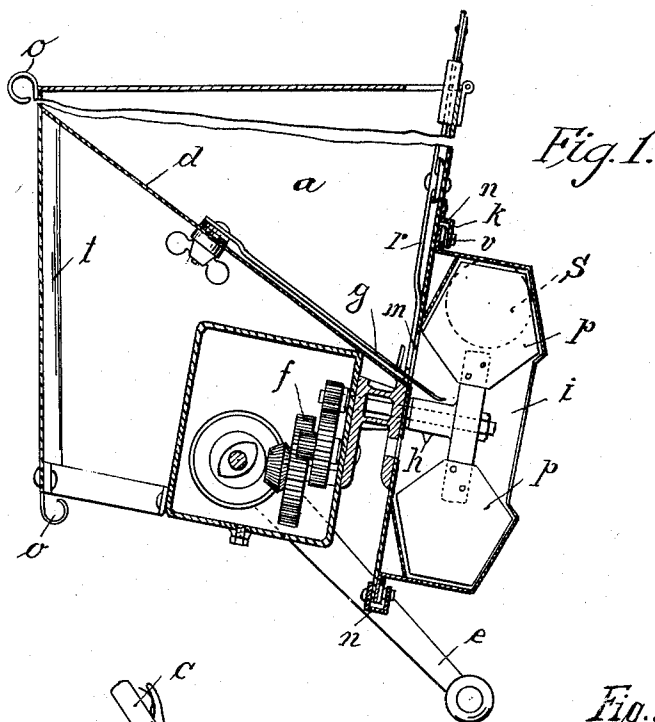
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DISTRIBUTOR FOR FINELY DIVIDED MATERIAL

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DISTRIBUTOR FOR FINELY DIVIDED MATERIAL

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1 Claim. (Cl. 275—2)

This invention relates to a portable machine with blade wheel actuated by a hand crank for strewing dry chemicals for the purpose of destroying weeds, hedge mustard and the like.

As compared with the known machines of this type that according to the invention is characterized in that the casing of the blade wheel extends directly from a downwardly inclined forwardly directed bottom plate of the portable container and that it is adapted to be turned together with its laterally directed strewing pipe in either direction around the blade wheel and at the same time the blade wheel imparts a vibratory movement to a resilient stirrer extending through the discharge aperture of the container.

Thus it is possible to adjust the strewing according to the direction of the wind and, owing to the lateral strewing, the operator cannot be inconvenienced. Owing to the downwardly inclined forwardly directed bottom plate of the container which is arranged in the direction in which the operator is walking, and owing to the operation of the stirrer in the discharge aperture of the container coacting with the rotary blade wheel, the advantages are obtained that the medium to be strewn passes into the casing of the blade wheel without clogging. The forward and downwardly directed sliding action is assisted by the vibrations caused by the operator walking. Consequently, all the material from the container can be strewn independently of the direction of the wind.

Further, owing to the possibility of varying the position of the strewing pipe the advantage is obtained that by walking backwards and forwards over the land to be strewn the operator can strew the ground one strip at the side of the other.

An embodiment of the invention is illustrated by way of example in the accompanying drawing in which:

Fig. 1 shows the machine in vertical cross section.

Fig. 2 is a front view of the machine.

The hopper *a* is provided with a forwardly and downwardly directed bottom plate *d* and has a carrying plate *t* with eyes *o* adapted to accommodate a belt by means of which the machine can be carried on the chest of the operator. In front of the discharge aperture *m* of the hopper *a*, a blade wheel *p* is mounted in a casing *i* and is adapted to be rotated by means of a gearing *f* and a hand crank *e*. The casing *i* can be turned with the strewing pipe *s* alternately towards the right or left after the clamping ring

k has been loosened. This ring is mounted in guides *n* fixed on the rear wall of a hopper *a* and can be tightened on the wedges *v* by being turned in the direction of the arrow (Fig. 2) by means of a handle *k'*. The clamping ring has a cut out portion *q* to enable it to be removed together with the casing *i*. On the inclined bottom plate *d* of the hopper *a* a stirring spring *g* is mounted in the interior of the hopper *a* and is resiliently vibrated by a cam *h* on the blade wheel shaft so that the material to be strewn cannot lodge in the discharge aperture *m* and can flow uniformly into the casing *i*. The discharge of the material from the hopper can, however, be regulated by a sliding plate *r* shiftable by a hand lever *c* adapted to slide over and be fixed in a guide bar *w*. The distributing mouth piece *u* fitted on the end of the distributing pipe *s* strews the material in lateral direction in such a manner that the operator is never inconvenienced by the powder strewn, irrespective of the direction of the wind.

By exchanging the strewing apparatus, the machine can be employed for strewing clover seed. It can also be easily mounted on a carriage.

I claim:—

A machine for strewing weed destroying media, fertilizers and the like with hand crank operated blade distributor and adapted to be carried by a chest plate with straps, comprising in combination a hopper having an aperture in its front wall, a downwardly and forwardly inclined bottom plate in said hopper extending to the lower edge of said aperture, a crank operated driving gearing in said hopper underneath said bottom plate, an axle driven by said gearing extending through the front wall of said hopper, a blade wheel on said axle in front of the front wall of said hopper, a casing rotatably mounted on the front wall of said hopper accommodating said blade wheel and communicating with the interior of said hopper through the aperture in the front wall thereof, a strewing pipe fixed on said casing, means for turning said casing together with said strewing pipe in either direction relative to said blade wheel, a stirring spring fixed at one end on the upper side of said bottom plate extending through the aperture in the front wall of said hopper, and a cam carried by said blade wheel under the free end of said spring adapted to impart a vibratory movement to said spring.

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