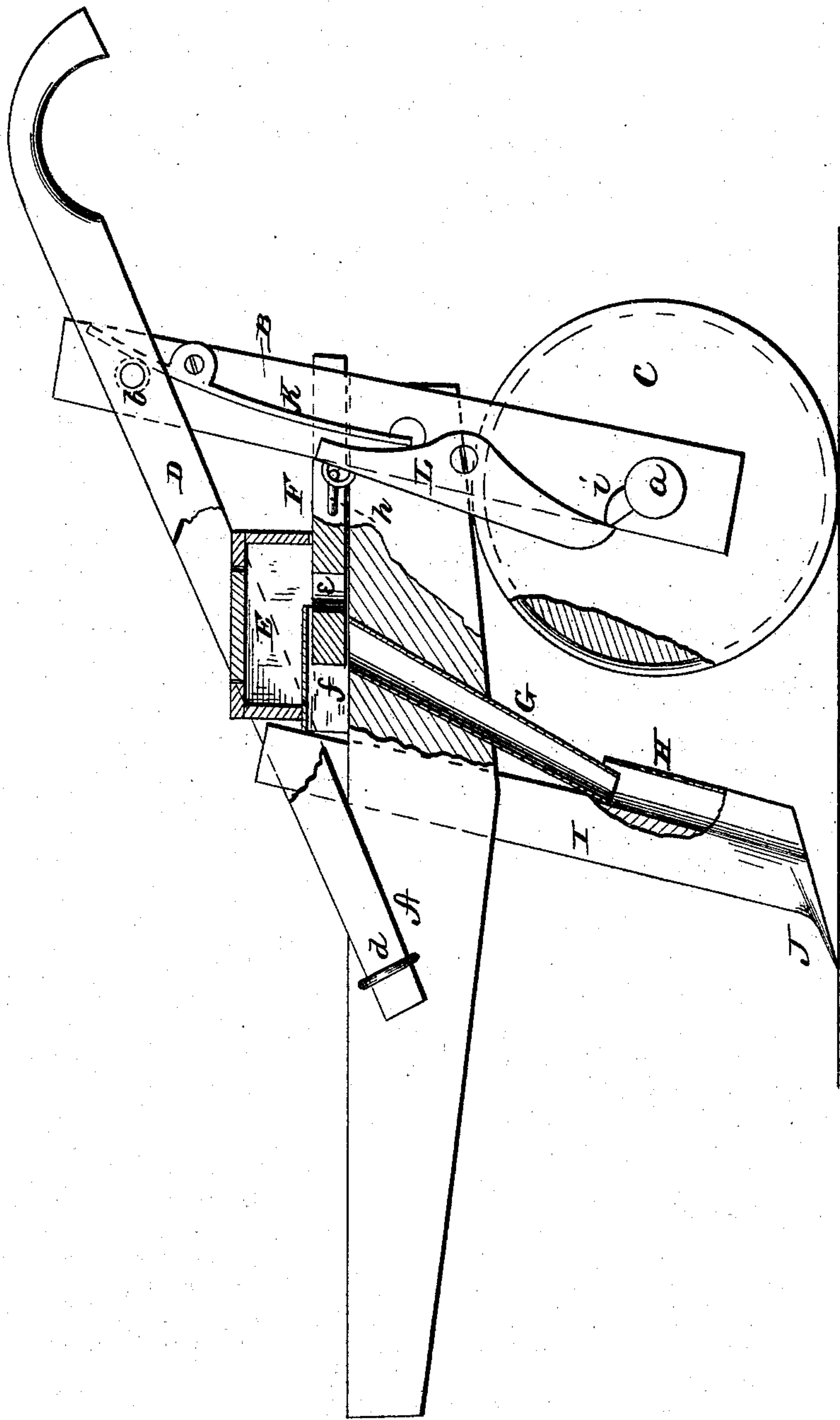


G. W. CLOYD.  
Colter for Grain-Dropper.

No. 211,225.

Patented Jan. 7, 1879.



WITNESSES  
Marck L. Ourand  
Frank J. [Signature]

By

INVENTORS  
Geo W. Cloyd  
Alexander Mason  
Attorneys

# UNITED STATES PATENT OFFICE.

GEORGE W. CLOYD, OF RACCOON, KENTUCKY.

## IMPROVEMENT IN COLTERS FOR GRAIN-DROPPERS.

Specification forming part of Letters Patent No. **211,225**, dated January 7, 1879; application filed March 27, 1878.

*To all whom it may concern:*

Be it known that I, GEO. W. CLOYD, of Raccoon, in the county of Laurel, and in the State of Kentucky, have invented certain new and useful Improvements in Colters for Grain-Droppers; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to grain-droppers; and it consists in the construction of a colter for the same, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a side elevation, partly in section, of a grain-dropper embodying my invention.

A represents the beam at the rear end, on each side of which is a standard; B, carrying in their lower ends the journals *a a* of the wheel C. D D are the handles, supported by the round *b*. E is the grain box or hopper, provided with the slide F, having the usual dropping-hole *e*. *f* is the cut-off in the hopper. The slide F is operated by means of an arm, *h*, lever L, spring K, and a cam or lug, *i*, on one of the wheel-journals *a*.

I represents the colter, which is made of a single piece or plate of metal doubled longitudinally and passed through a mortise in the beam A, where it may be adjusted up and down as required, and held by means of a pin or bolt, or in any other suitable manner.

The two thicknesses of the metal at the lower end of the colter are spread outward at the sides and front to form a point, J, in the shape of a duck-bill.

This colter with its duck-bill point is particularly intended for use in turf and new ground to split the turf and cut the roots, and the particular construction of the colter causes it to so lift the ground as to deposit the grain without any extra coverer, the wheel C being only intended for operating the dropping mechanism, and not to cover the grain.

At the rear edge, near the bottom of the colter, the metal is drawn out or otherwise made to form a tube, H, into which the lower end of the grain-conductor G is inserted, thus causing the grain to be deposited directly at the heel of the duck-bill point J.

I do not claim a seed-conduit arranged on the rear of a colter for a seed-dropper, as I am aware that such is not new.

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

A colter for grain-droppers made of a single plate of metal doubled, so that in the main portion thereof the metal is side by side, and having a short tube, H, on the rear and the duck-bill point J at the lower end, all formed of the same piece or plate of metal, substantially as herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of March, 1878.

GEORGE WASHINGTON CLOYD.

Witnesses:

JOHN W. MULLINS,  
PRESTON TINSLEY.