

No. 774,799.

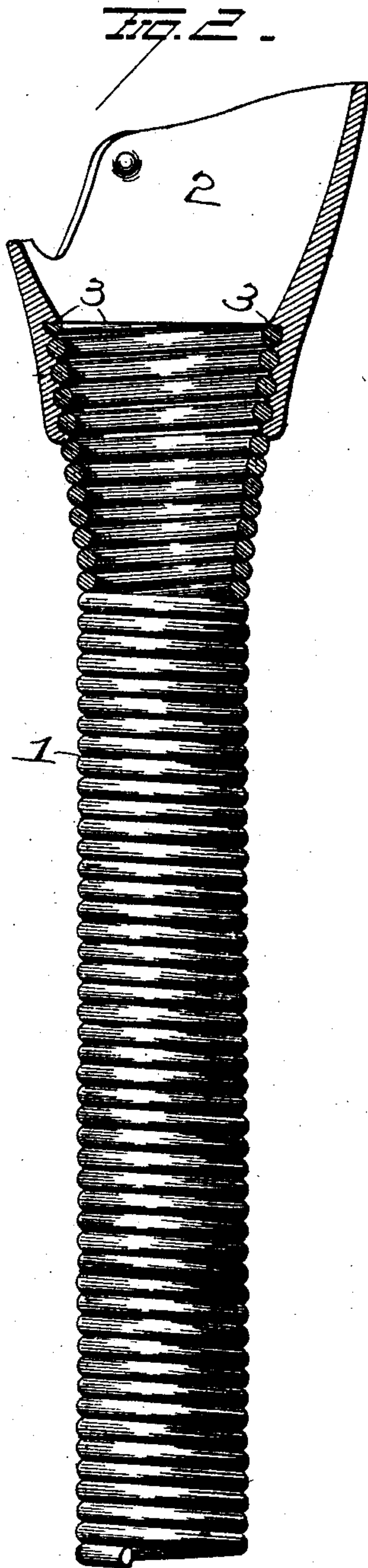
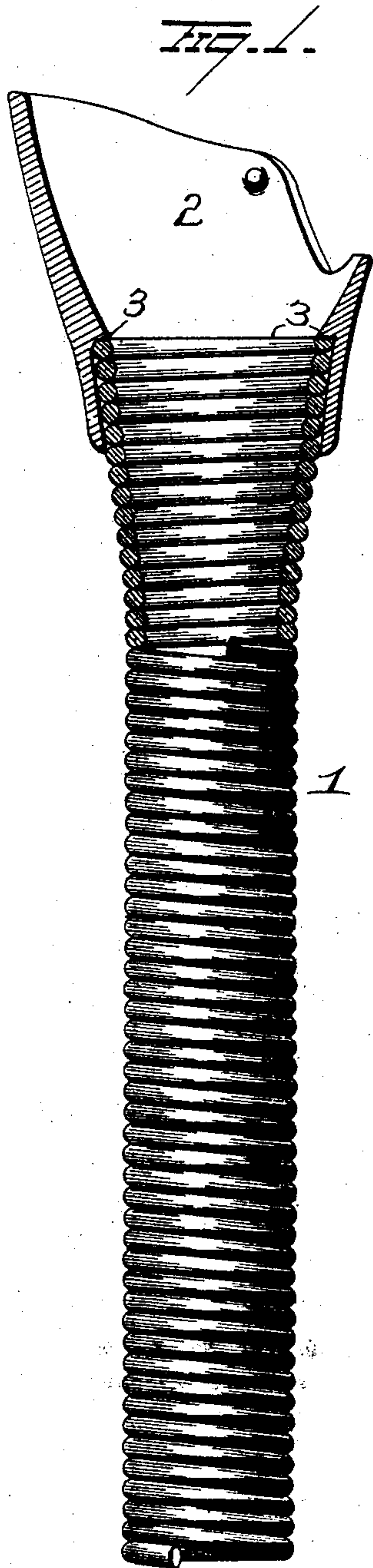
PATENTED NOV. 15, 1904.

W. A. VAN BRUNT.

DRILL TUBE.

APPLICATION FILED JULY 26, 1904.

NO MODEL.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

WILLARD A. VAN BRUNT, OF HORICON, WISCONSIN.

## DRILL-TUBE.

SPECIFICATION forming part of Letters Patent No. 774,799, dated November 15, 1904.

Application filed July 26, 1904. Serial No. 218,276. (No model.)

*To all whom it may concern:*

Be it known that I, WILLARD A. VAN BRUNT, a resident of Horicon, in the county of Dodge and State of Wisconsin, have invented certain new and useful Improvements in Drill-Tubes; and I do hereby 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.

My invention relates to an improved drill-tube, and more particularly to an improved drill-tube and grain-receiver, the object of the invention being to provide improved construction of tube and receiver and improved manner of securing them together; and the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in longitudinal section, illustrating my improvements; and Fig. 2 is a similar view of a modification.

1 represents a drill-tube composed of coiled wire, flared or made slightly funnel shape at its upper end.

2 represents a cast-metal grain-receiver of general funnel shape, into which the drill-tube 1 is secured, the operation of connecting the tube and receiver being to insert the smaller end of the tube into the top of the receiver and turning the tube until it is firmly screwed into place. The receiver 2 is provided with an internal lip or flange 3, projecting over the upper edge of tube 1, preventing any upward movement of the tube in the receiver and also preventing any obstruction of grain by the upper end of the tube, and owing to the flared or funnel shape of the upper end of tube 1 fitting into the similarly-shaped receiver there is no possibility of the tube pulling downward out of the receiver, and they are firmly locked together. If desired, the interior of the receiver may be made screw-threaded, as shown in Fig. 2, to receive and lock with the coils of tube 1, and the tube might be otherwise made and secured in the receiver in various ways which will se-

cure them tightly together and correctly guide the grain into the tube.

My invention is a great improvement over the old construction of similar devices wherein the tubes are secured on the outside of the receivers, as such latter constructions, owing to the necessary bending of the tubes in planting, tends to and does spread the coils and destroys the efficiency of the tube. With my improvements undue separation of the coils is made quite impossible during any ordinary operation of a drill.

Slight changes might be made in the general form and arrangement of the parts described without departing from my invention, and hence I do not restrict myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. The combination with a grain-receiver made in a single casting, of a grain-tube having a portion which is of less diameter than the diameter of the opening in the grain-receiver to permit the tube to be inserted downwardly through the receiver, the said tube having an enlarged upper portion tightly fitting within a seat formed in the lower end of the receiver.

2. The combination with a grain-receiver made in a single casting and provided with a flange or lip, of a grain-tube the body of which is of a diameter sufficiently small to pass downwardly through the opening in the receiver, and provided with an enlarged upper end, which latter rests in a correspondingly-flared portion of the receiver below the flange or lip.

3. The combination with a grain-receiver, of a coiled tube having a flared upper end, the said tube adapted to be passed downwardly through the receiver with its flared upper end engaging a threaded seat in the receiver.

4. The combination with a grain-receiver, of a coiled grain-tube having a flared or funnel-shaped upper end adapted to be screwed

down through the receiver and a flange in said receiver projecting over the upper edge of the tube.

5 The combination with an internally-screw-threaded receiver of general funnel shape, of a coiled wire tube having a flared or funnel-shaped upper end screwed down through said receiver.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

WILLARD A. VAN BRUNT.

Witnesses:

F. H. CLAUSEN,  
H. MARSH.