

(No Model.)

P. S. WYNNE.

GRAIN CARRIER FOR SELF BINDERS FOR HARVESTERS.

No. 443,031.

Patented Dec. 16, 1890.

Fig. 1.

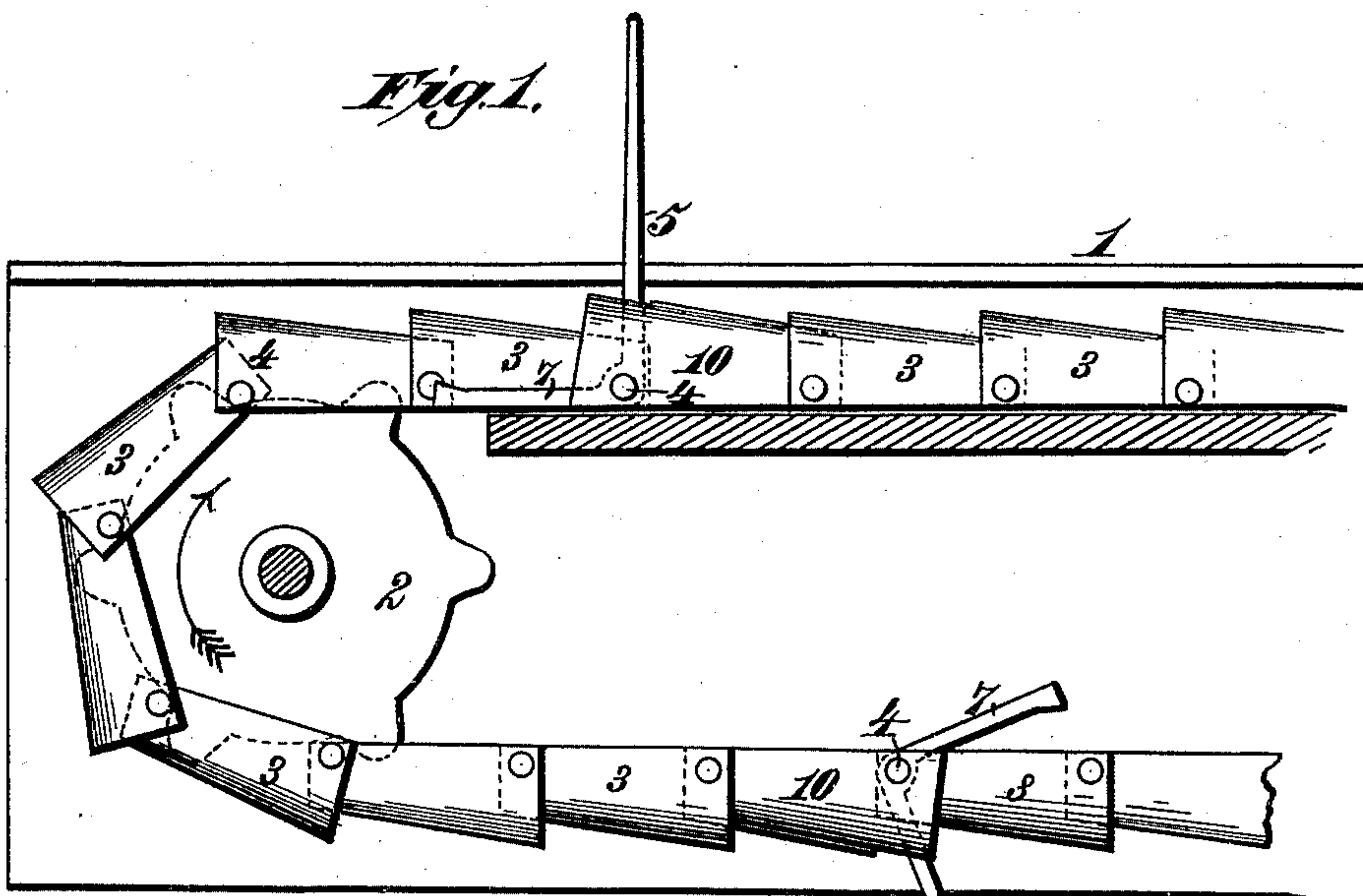


Fig. 2.

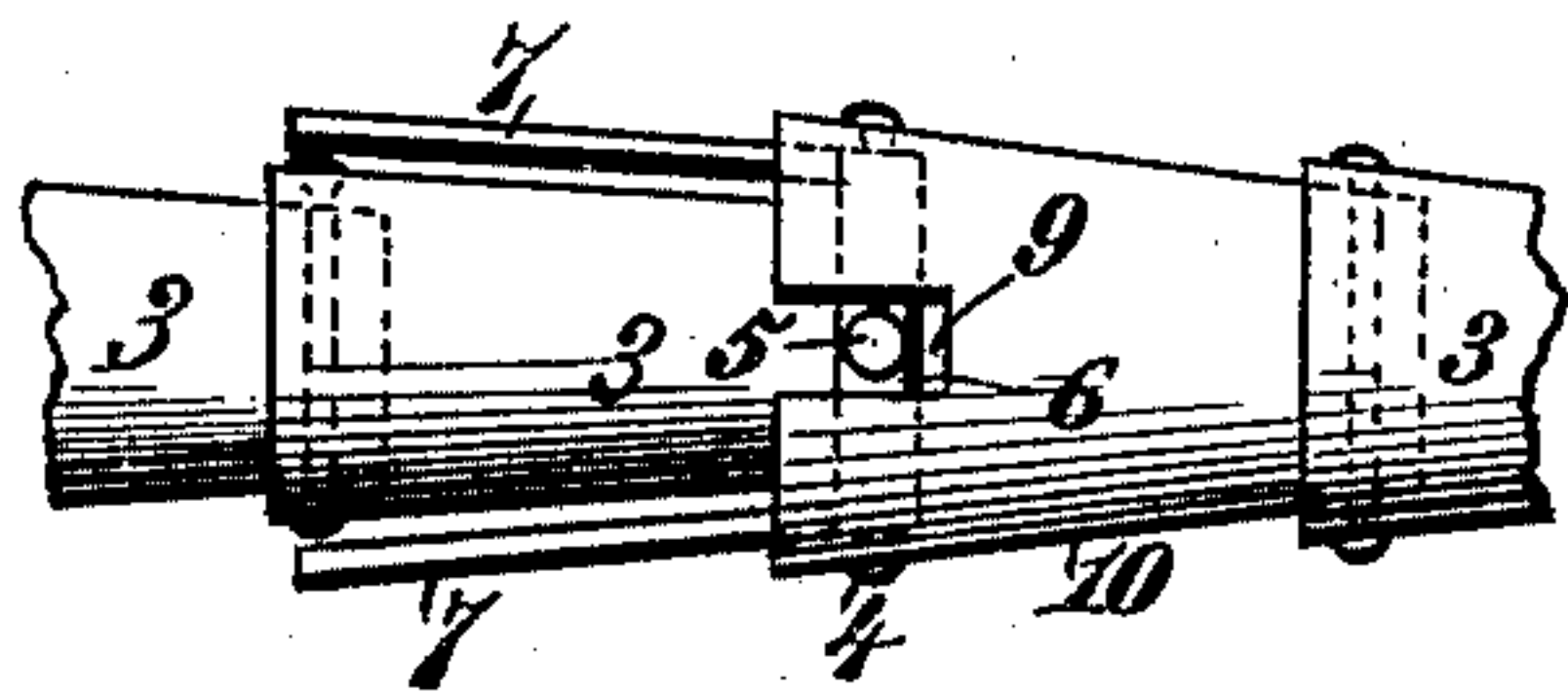


Fig. 3.

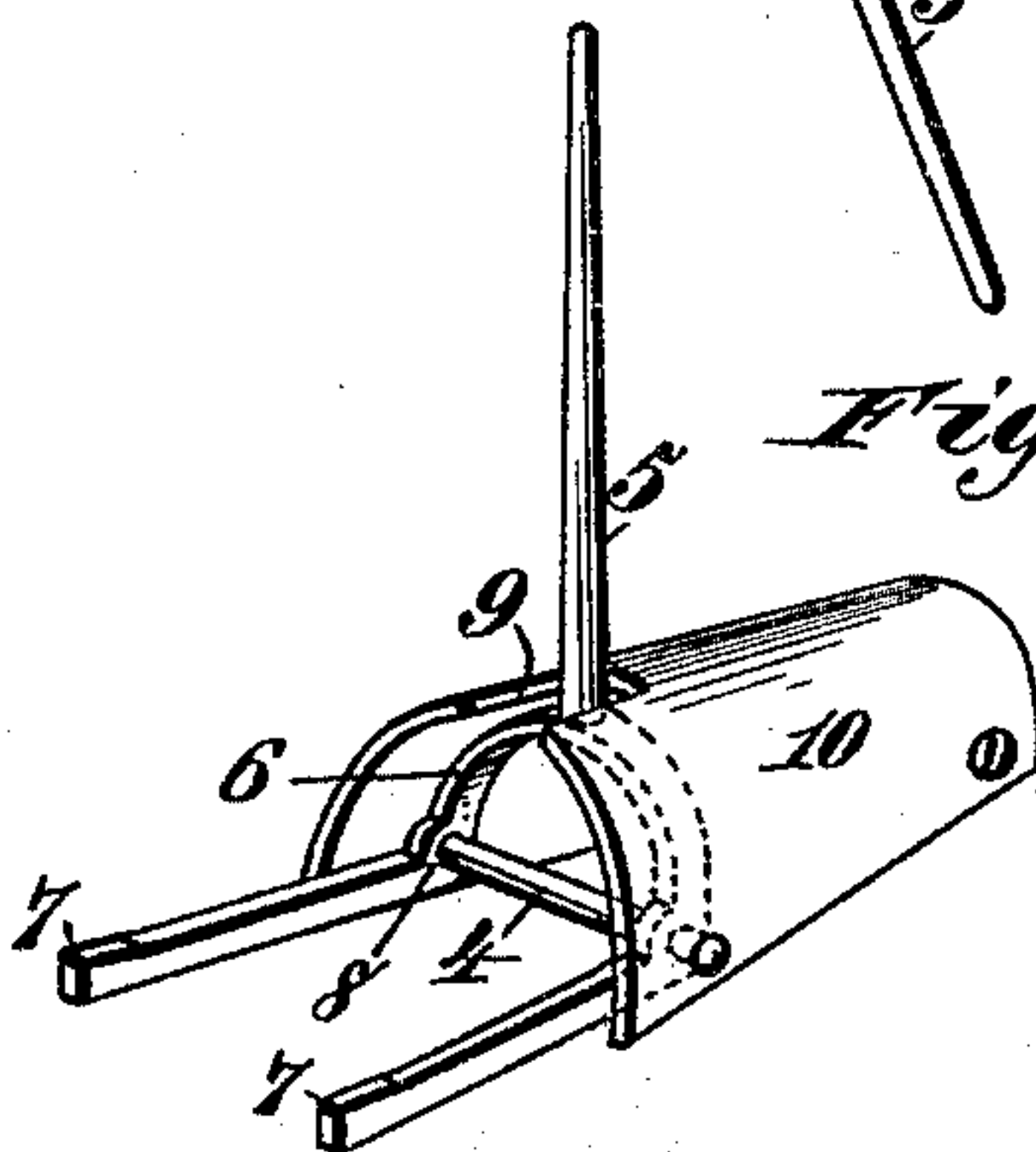


Fig. 4.

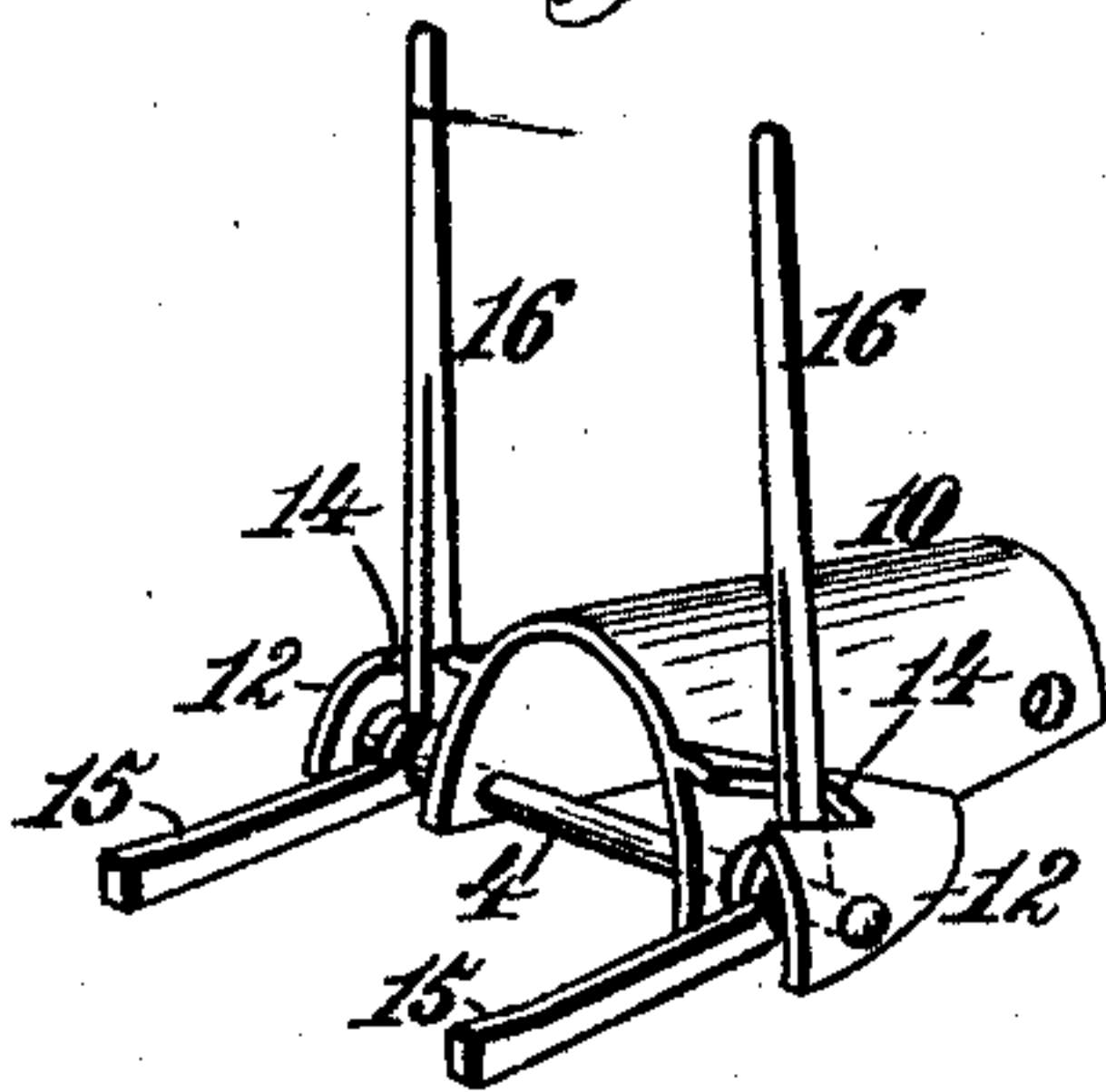
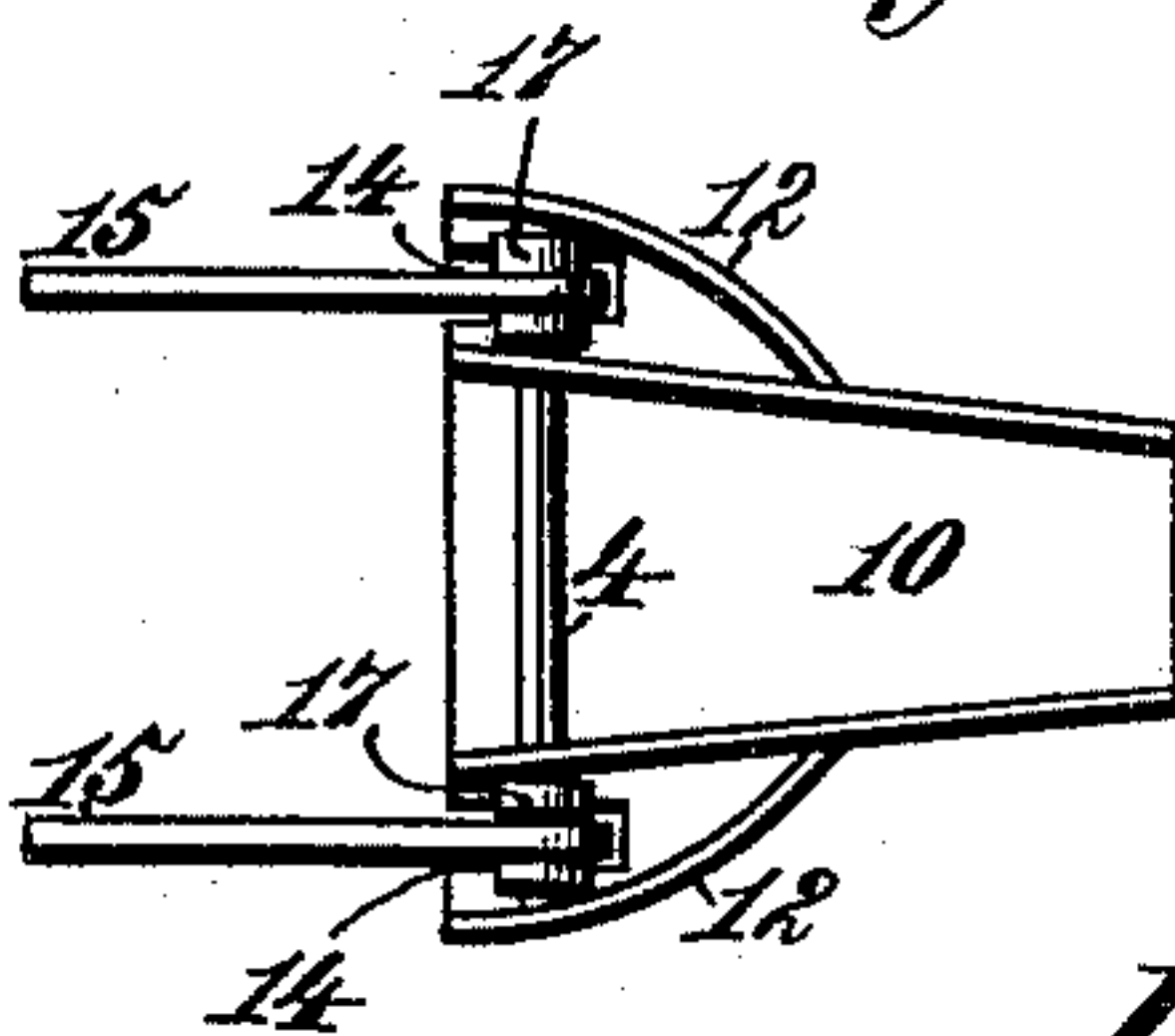


Fig. 5.



Witnesses.

Robert G. Smith.

J. A. Rutherford

Inventor

Pembroke S. Wynne.

By

James L. Norris.

Atty.

UNITED STATES PATENT OFFICE.

PEMBROKE S. WYNNE, OF EDINBURG, MISSOURI.

GRAIN-CARRIER FOR SELF-BINDERS FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 443,031, dated December 16, 1890.

Application filed April 23, 1890. Serial No. 349,129. (No model.)

To all whom it may concern:

Be it known that I, PEMBROKE S. WYNNE, a citizen of the United States, residing at Edinburg, in the county of Grundy and State of Missouri, have invented new and useful Improvements in Grain-Carriers for Self-Binders for Harvesters, of which the following is a specification.

My invention relates to certain improvements in self-binders, and particularly in that portion of the apparatus by which the grain is carried to the binding-table.

It is the purpose of my invention to provide a chain for sprockets of the binder-carrier having such construction that its links shall not become clogged with straw.

It is my further purpose to combine with a sprocket-chain having the construction set forth a series of falling teeth or grain-carrying fingers pivotally mounted upon the chain, which may either straddle the links or be arranged laterally on either one or both sides of the same, means being provided whereby the said carrying-fingers are brought into and retained in proper position with relation to the sprocket-chain.

My invention consists to these ends in the novel features of construction and new combinations of parts hereinafter fully described, and then definitely pointed out in the claims which follow this specification.

Said invention will be fully understood from the following description, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional view of the grain-table of a self-binder, showing the application of my invention thereto. Fig. 2 is a plan view of a portion of the sprocket-chain. Fig. 3 is a perspective view of a link provided with one form of grain-carrying fingers. Figs. 4 and 5 are respectively a perspective and bottom plan view of a modified construction of link and grain-carrying fingers.

In the said drawings, the reference-numeral 1 designates the grain-table or harvester-platform of a harvester of ordinary construction, and the numeral 2 denotes one of the sprockets which carry the chain by which motion is communicated to the straw or grain carrier. This chain consists of a series of links 3, each having approximately the form of a semi-cylindrical shell, save that the body thereof is of slightly greater diameter at one end than at the other, in order that the end of the succeeding link may extend therein. The links are connected by transverse pivot-bars 4, which engage the teeth of the sprockets. At suitable intervals in the chain are arranged falling teeth or grain-carriers 5, consisting of bars of metal of suitable length, united at one end to a fork 6, having parallel knee-pieces 7. At the angles between the fork and the knee-pieces are formed holes 8. This forked portion straddles the smaller end of one of the links, and the openings 8 receive the ends of the pivot-bars 4, the knee-pieces lying beside and substantially parallel with the edges of the semi-cylindrical shell. The falling teeth or grain-carriers when constructed in the manner described may lie in a slot 9, cut in the back of the link 10, which lies immediately in front of said falling teeth.

I may substitute for the construction set forth the single falling tooth or grain-carrier shown in Figs. 4 and 5. In this case I form lateral wings 12 upon each link or shell, which receive the prolonged ends of the pivot-bars. These wings are arched, and in the back or upper portion of each is cut a slot 14, substantially parallel with the axis of the link. The falling tooth or grain-carrier used with this construction is a bar 16 of suitable length having the knee-piece 15, an opening being formed at the angle which receives the end of the pivot-bar. Bracing-washers 17 are slipped upon the pivot-bars upon each side of the pivotally-mounted grain-carriers. The lateral wings 12 are formed upon the large end of the link, so that they afford no impediment to the connection of the succeeding link, in the manner already set forth—that is to say, by the insertion of the smaller end of the one link within the larger end of the engaging shell or link.

What I claim is—

1. In a harvester-binder, a sprocket-chain composed of a series of links consisting each of an approximately semi-cylindrical shell having slightly greater diameter at one end than at the other, the small end of one being inserted in the large end of the other and connected by a pivot-bar, substantially as described.

What I claim is—

1. In a harvester-binder, a sprocket-chain composed of a series of links consisting each of an approximately semi-cylindrical shell having slightly greater diameter at one end than at the other, the small end of one being inserted in the large end of the other and connected by a pivot-bar, substantially as described.

2. In a self-binder, the combination, with the sprockets of the straw-carrier, of a chain consisting of a series of approximately semi-cylindrical shells having slightly greater diameter at one end than at the other, the smaller end of one shell or link being inserted in the larger end of the adjacent link and pivotally connected by cross-bars, and a series of grain-carrying fingers pivotally mounted on said chain at suitable intervals, substantially as described.

3. In a self-binder, the combination, with the sprockets of the straw-carrier, of a sprocket-chain composed of hoods or shells of approximately semi-cylindrical form, the smaller end of one being inserted within the larger end of the next and connected by a transverse pivot-bar, a series of grain-carrying fingers consisting of bars bent at right angles, or substantially so, and having one or more openings which receive the prolonged ends of the pivot-bars, the latter being also supported in lateral wings on the shell-links, and the grain-carrying fingers standing in slots in said wings, substantially as described.

4. In a harvester-binder, the combination, with the sprockets, of one or more sprocket-chains having links composed of hoods or shells of sheet metal, each shell being of less diameter at one end than at the other, whereby the smaller end of the link may be inserted in the larger end of the other or adjacent link, to which it is connected by transverse pivot-bars, and grain carriers or fingers turning upon said transverse fingers, substantially as described,

5. In a harvester-binder, the combination, with the sprockets, of a sprocket-chain having its links composed of hoods or shells of sheet metal, the end of one being inserted within the end of the other and united thereto by a pivotal bar which engages the teeth of the sprocket-wheel, and grain-carrying fingers which are carried by and having communication with the transverse pivot-bars of the chain, said forks having also knee-pieces bent at right angles to the fingers and lying upon each side of the chain, substantially as described.

6. In a grain-carrier for harvester-binders, a sprocket-chain composed of a series of hoods, the end of one being inserted within the larger end of the adjacent hood and pivoted therein by a pivot-pin, substantially as described.

7. In a grain-carrier for harvester-binders, the combination, with the sprockets, of a sprocket-chain composed of a series of hoods having one end inserted within the slightly greater end of the other and adjacent hood, and one or more grain-carrying fingers mounted in or upon said hoods at suitable intervals and supported by pivot-bars connecting said hoods one to another, substantially as described.

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

PEMBROKE S. WYNNE.

Witnesses:

R. G. KETSON,
V. M. SMITH.