

No. 698,461.

Patented Apr. 29, 1902.

J. J. CROWLEY.
HEAD BLOCK OR FOLLOWER.

(Application filed June 29, 1901.)

(No Model.)

Fig. 1.

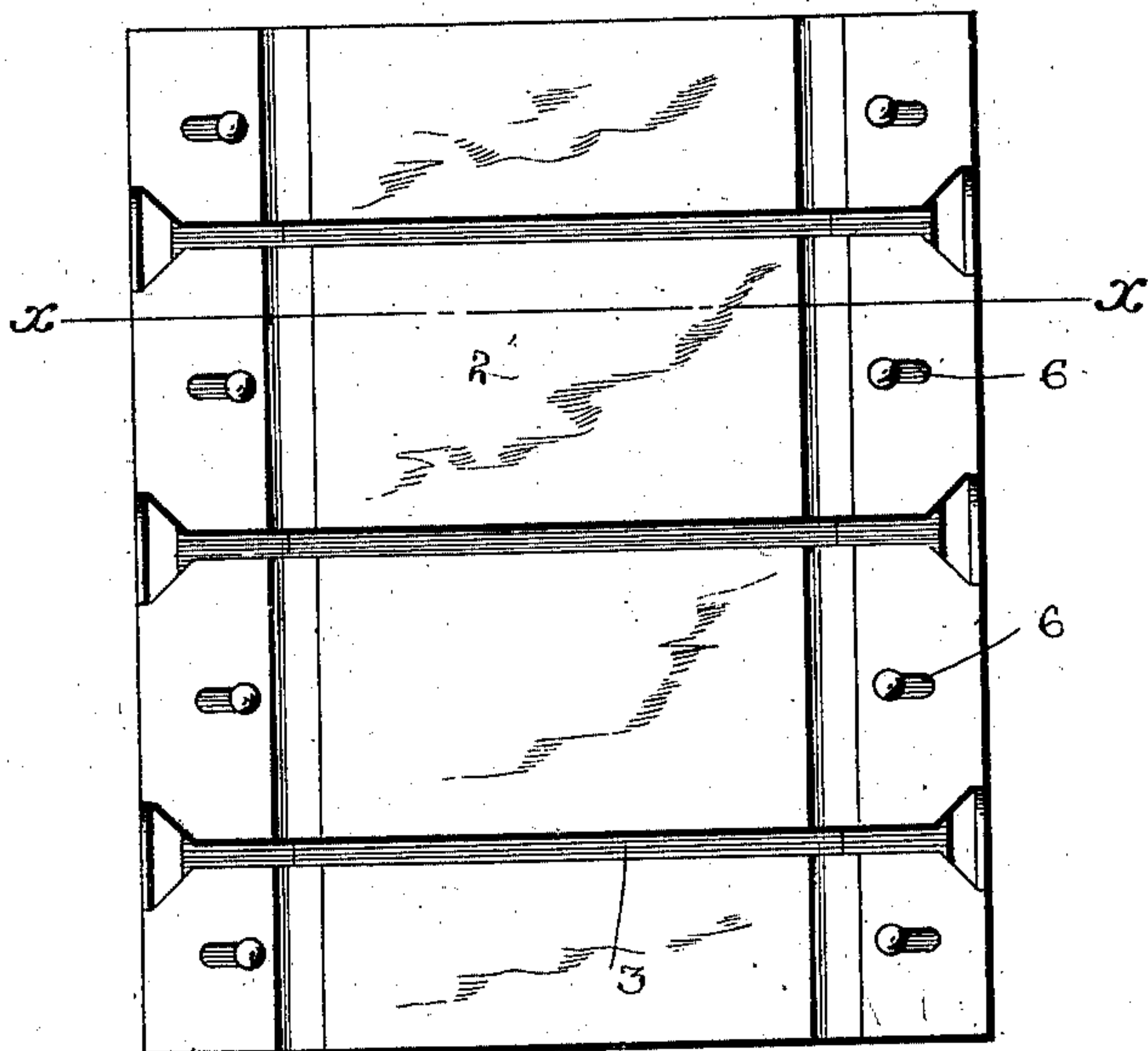


Fig. 2.

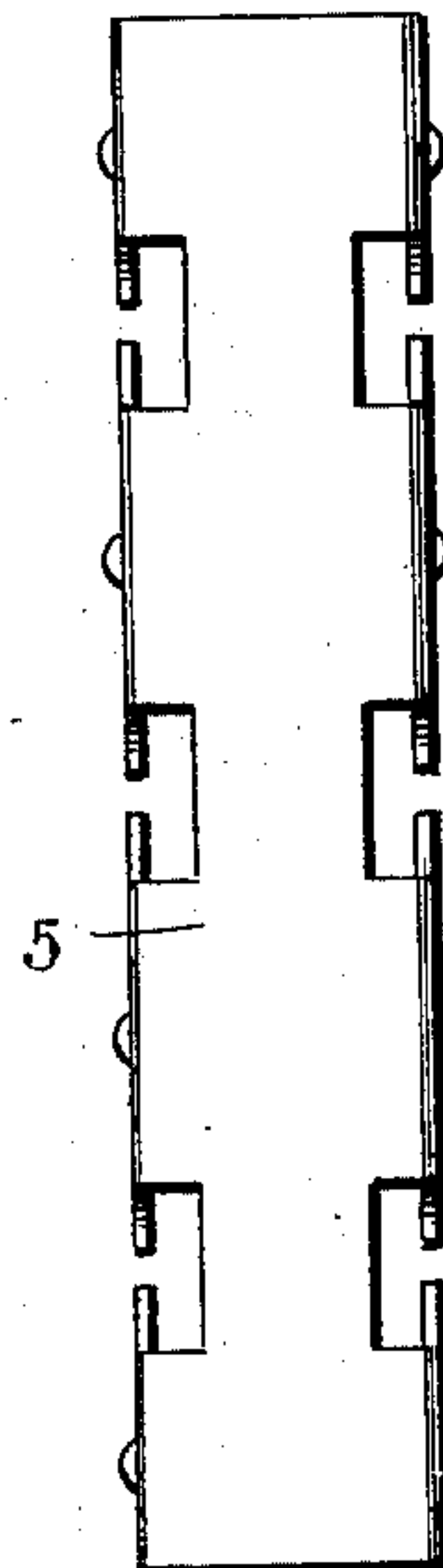


Fig. 4.

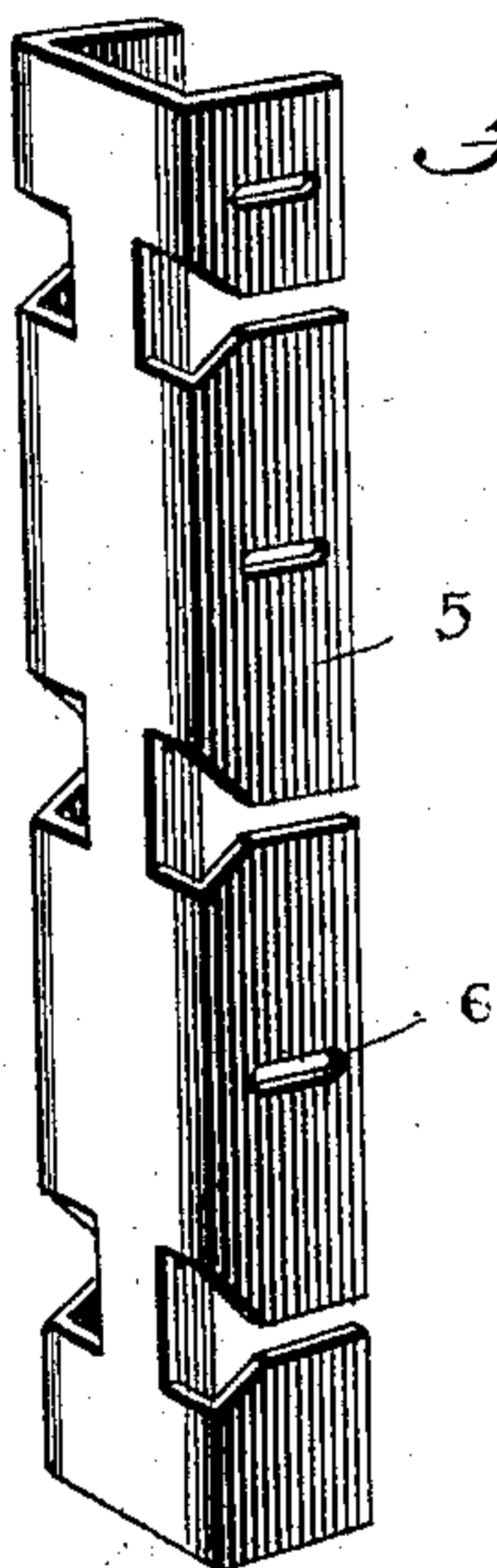


Fig. 3.

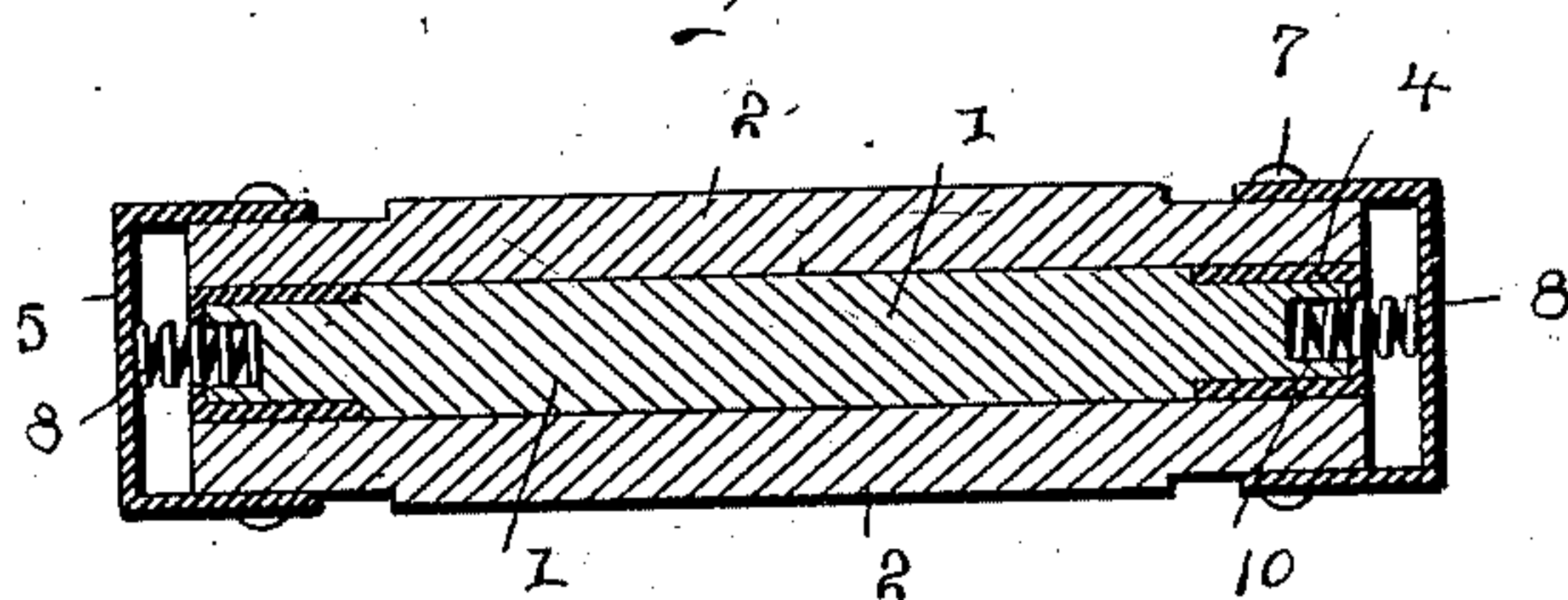
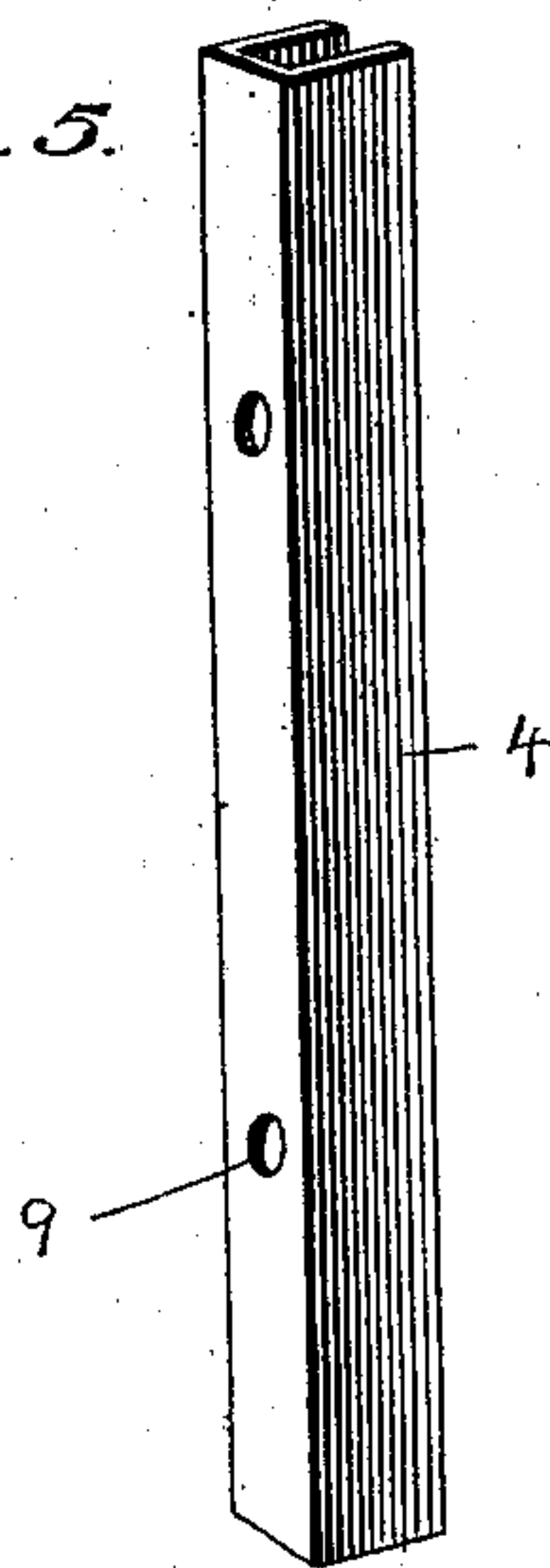


Fig. 5.



Witnesses

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JOHN J. CROWLEY, OF LOGAN, MONTANA.

HEAD-BLOCK OR FOLLOWER.

SPECIFICATION forming part of Letters Patent No. 698,461, dated April 29, 1902.

Application filed June 29, 1901. Serial No. 66,580: (No model.)

To all whom it may concern:

Be it known that I, JOHN J. CROWLEY, a citizen of the United States, residing at Logan, in the county of Gallatin and State of Montana, have invented new and useful Improvements in Head-Blocks or Followers, of which the following is a specification.

This invention relates to improvements in head-blocks or followers for baling-presses, the object being to provide a block having yielding bearing members at its side edges adapted to expand and contract to accommodate the block to varying width of the press-chamber from the entrance to the delivery end of said chamber, to provide for the ready and convenient application of the binding-wires, and to provide a block which is simple of construction, cheap to manufacture, which is of maximum strength, and which will effectually prevent the wedging of the hay between the block and walls of the chamber and the interference of the same with the movement of the follower and the operation of baling.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly set forth in the appended claims.

In the accompanying drawings, Figure 1 is a side view of a head-block embodying my invention. Fig. 2 is an end elevation of the block. Fig. 3 is a cross-section on the line xx of Fig. 1. Fig. 4 is a perspective view of one of the yielding bearing-plates, and Fig. 5 is a similar view of one of the reinforcing and wear plates.

Referring now more particularly to the drawings, the numeral 1 designates the solid body of the block, which is provided upon its opposite sides with spaced strips or plates 2 of wood or metal, which form between them transverse grooves 3 for the passage of the binding cords or wires. The purpose of forming the body of the block of a solid piece of material and applying the transverse strips thereto to form the grooves is to provide a block of maximum strength which will not give or yield under pressure and in which in the event that the walls of the transverse grooves should become casually broken away or otherwise injured repairs may be readily

and cheaply made by substituting new strips for those broken or injured, and thus to preserve the proper shape and formation of the block and grooves.

The sides of the body portion 1 at the ends or side edges thereof are recessed to receive channeled metallic reinforcing and wear plates 4, which embrace the said side edges of the body portion and strengthen the same at the points whereon the greatest strain and wear come. The ends of the transverse strips 2 are also vertically recessed to form spaces for the reception of the sides of metallic bearing-plates 5. The said bearing-plates are each constructed of a single strip of metal having its sides bent at right angles, forming channeled plates. The sides of said bearing-plates have elongated slots 6 for the reception of headed pins, bolts, or studs 7, which enter said side pieces or pass entirely through the block, as preferred, and thereby movably securing the bearing-plates to the block in such manner as to allow said plates to have a limited independent movement in a direction transversely of the block. Intermediate the said slots in the sides of bearings-plates are grooves 6^a, terminating in enlarged rectangular openings in the face of said plates and which register with the grooves in the block. By the described construction it will be seen that the sides of the wear and reinforcing plates 4 and bearing-plates 5 lie flush with the outer faces of the body 1 and end strips 2, so as to make the block compact and at the same time prevent the formation of projecting surfaces in which the hay may lodge and interfere with the free motion of the head-block and the speedy operation of baling.

The body portions or ends of the bearing-plates 5 cover and protect the side edges of the block, and interposed between the same and the block are spiral springs 8, which bear at their outer ends against said bearing-plates and project at their inner ends through openings 9, formed in the reinforcing-plates 4, and are seated in sockets formed in the side edges of the body 1. These springs exert their energy to force the bearing-plates 5 outwardly from the ends of the block to the limit afforded by the pins or studs 7, which thus act in the nature of stops.

By the yielding action of the bearing-plates

5 the block is capable of being compressed or reduced sufficiently to permit of its passage out through the smaller or delivery end of the press-chamber, which chamber is made
5 tapering. It will thus be understood that the block or follower will fill the entire width of the press-chamber from its entrance through-
10 out its entire length to the delivery end thereof during the baling operation, and the bearing-plates 5 will bear directly against the walls of the chamber and be maintained in contact therewith by the springs 8, thereby leaving no space around or at either side of the follower or head-block for the wedging of
15 the hay therein, as is the case with the block of ordinary construction, so that the speedy progress of the operation of baling will not be interfered with.

By making the body of the block solid and
20 providing it with yielding bearing-plates at its ends the block is prevented from buckling, springing, or breaking under pressure, and thus the production of a block of maximum strength is insured.

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

1. A head-block or follower comprising, a body portion, channeled wear and reinforcing
30 plates embracing the ends of the body portion, channeled bearing-plates embracing the ends of the block and provided with elongated slots, pins passing through said slots and into the block movably connecting the bearing-
35 plates to the block, and springs interposed between the block and bearing-plates to yield-

ingly hold the same against the walls of the press-chamber.

2. A head-block or follower comprising a body portion, strips upon the sides of the
40 block and spaced to form grooves for the passage of the binding-wire, channeled bearing-plates embracing the ends of the block and strips, and provided with elongated slots, pins passing through said slots and into the block
45 movably connecting the bearing-plates to the block, and springs interposed between the block and bearing-plates to yieldingly hold the same against the walls of the press-chamber.
50

3. A head-block or follower comprising a body portion formed in its side edges with sockets, transverse strips upon the sides of the block and spaced to form grooves for the
55 passage of the binding-wire, channeled wear and reinforcing plates embracing the ends of the block and interposed between the same and strips and provided with openings registering with said sockets, channeled bearing-plates embracing the ends of the block and
60 strips and movably mounted upon the block, and springs seated in said socket and projecting through the openings in the reinforcing-plates and bearing against said bearing-plates.
65

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

JOHN J. CROWLEY.

Witnesses:

G. L. SMITH,
E. A. SANBORN.