

No. 665,940.

Patented Jan. 15, 1901.

H. F. SCHWENKER.
HINGE.

(Application filed May 19, 1900.)

(No Model.)

Fig. 1.

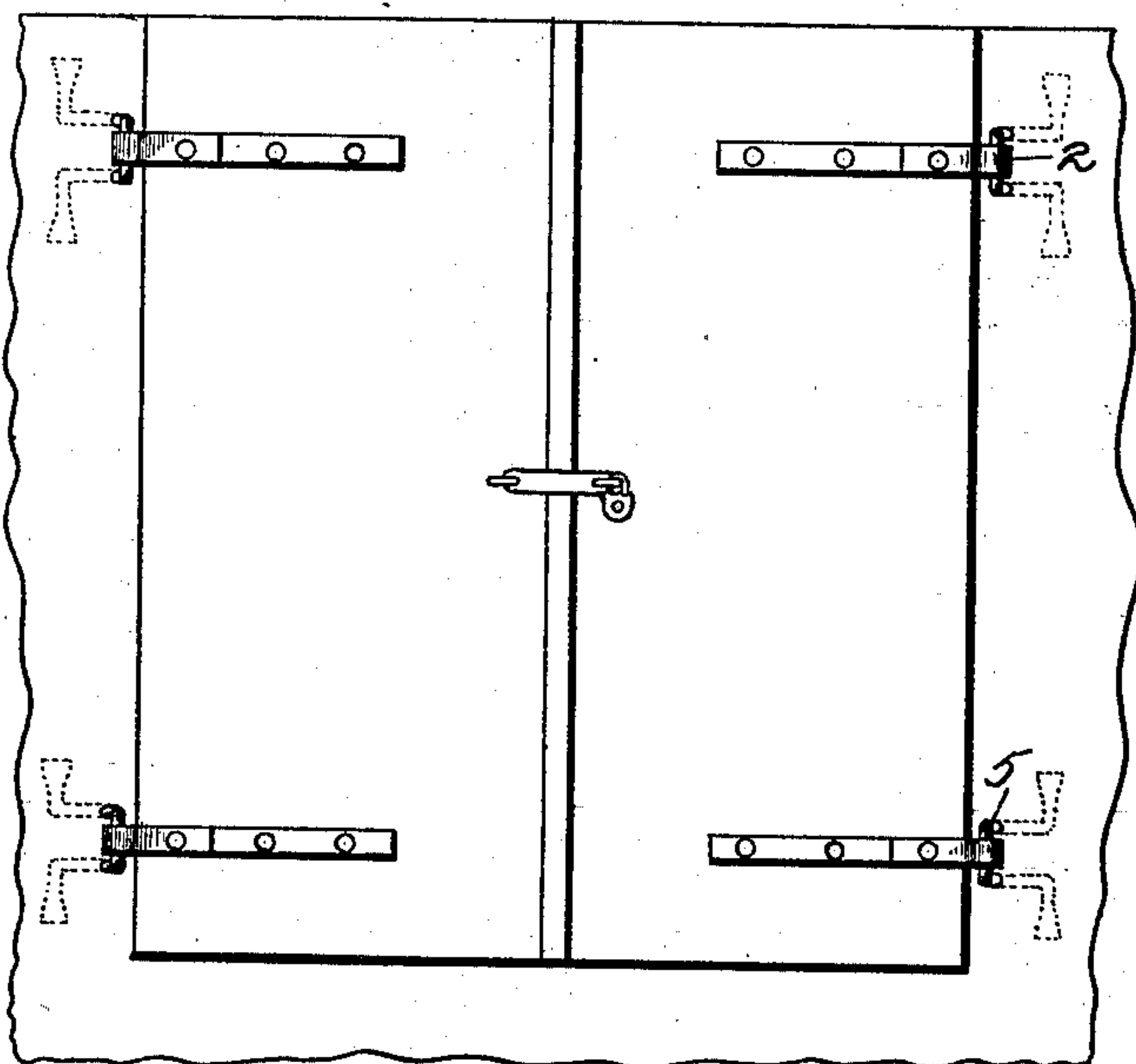


Fig. 2.

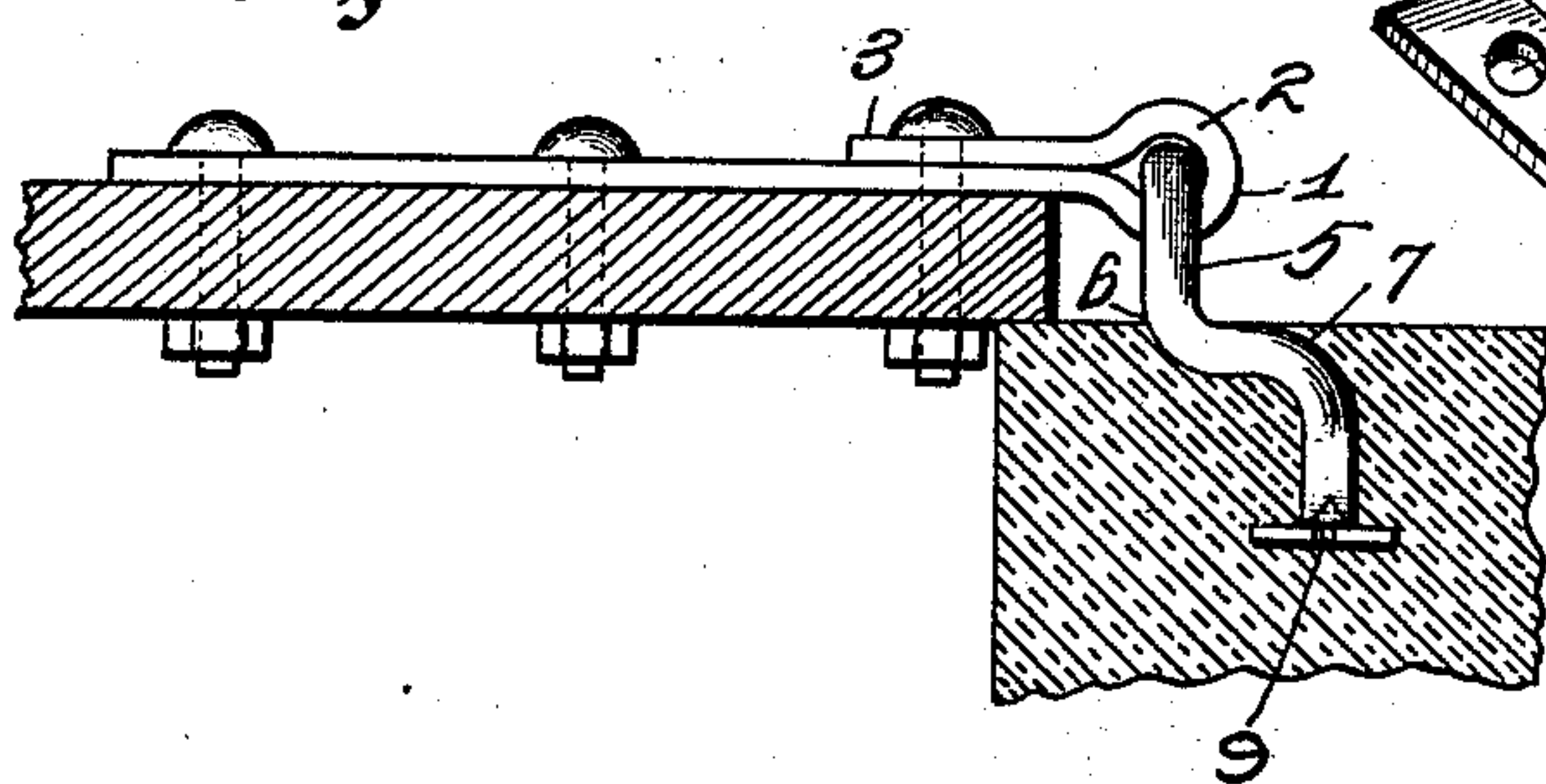


Fig. 3.

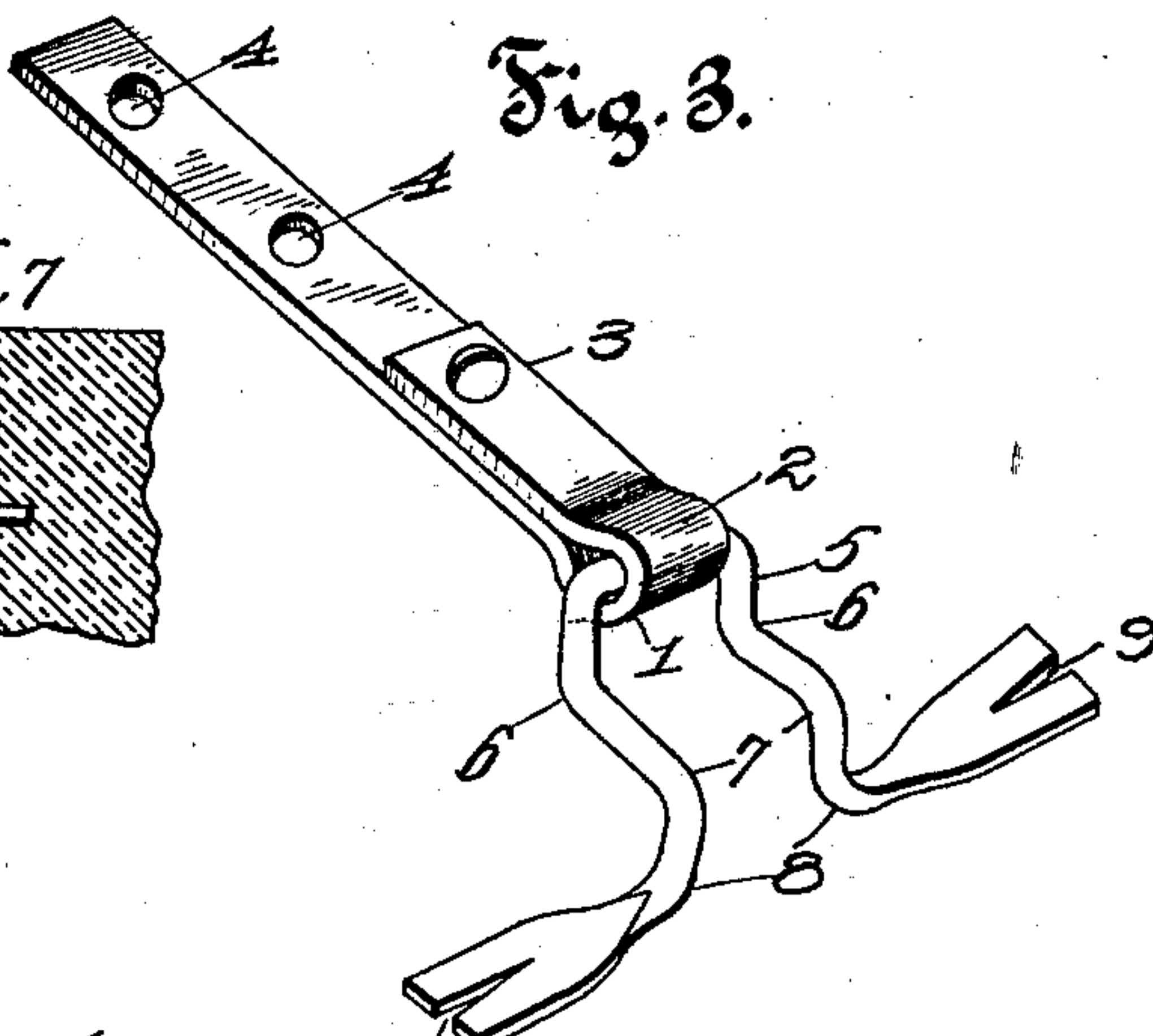
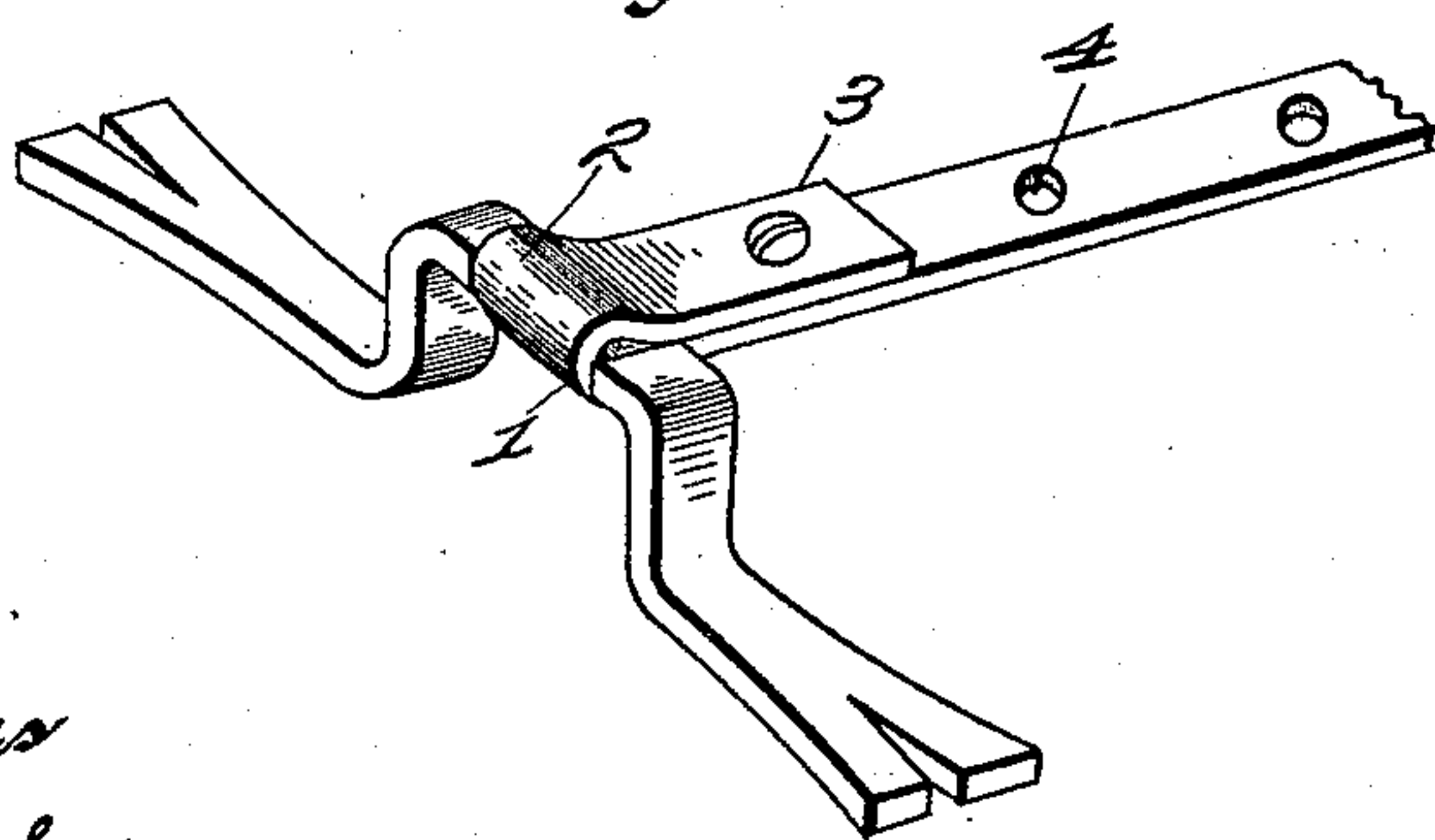


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY F. SCHWENKER, OF ST. LOUIS, MISSOURI.

HINGE.

SPECIFICATION forming part of Letters Patent No. 665,940, dated January 15, 1901.

Application filed May 19, 1900. Serial No. 17,220. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. SCHWENKER, of the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Hinges, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

This invention relates to improvements in hinges for cellar-doors; and it consists in the novel arrangement, construction, and combination of parts, as will be more fully hereinafter described, and set forth in the claim.

One object of this invention is to construct a hinge to be used on ordinary outside cellar-doors and so arranged as to be perfectly solid and rigid when embedded in a concrete foundation.

Another object is by its use the wooden frame of a cellar-door is entirely dispensed with.

Figure 1 is a top plan view of a cellar-door, showing my improved hinge in position. Fig. 2 is an enlarged vertical sectional view of a portion of a cellar-door and concrete foundation, showing my improved hinge in position. Fig. 3 is a perspective view of the hinge. Fig. 4 is a perspective view of a hinge made use of for supporting very heavy doors.

In the construction of the device as shown I provide a strap composed of flat wrought-iron of sufficient length and is bent at 1, forming a loop 2, its end 3 resting upon the top of the strap. (See Fig. 3.) Said strap is provided with bores 4, through which are passed bolts by which said strap is securely held to the door. Through the loop 2 is passed and held a strip of material 5, each end being bent at right angles, forming a U-shaped rod, which ends are again bent at 6 and again at 7, forming a double right angle, the purpose of which is to allow the supporting end to project near the foundation end.

(See Fig. 2.) The rod is again bent at 8 in a horizontal plane and the ends flattened and spread, and each provided with a slit 9, the purpose of which is to allow the concrete to pass therein and cause the same to be more rigidly supported and fixed. The flared ends and the bent portion of the rod are embedded in the concrete up to the vertical U-shaped portion, allowing just enough of the supporting end to project to correspond to the thickness of the door and strap to be swung.

The doors upon which this class of hinge is used are sidewalk cellar-doors such as are level with the concrete walk.

In cases where very heavy iron doors are used I construct the hinge as shown in Fig. 4, which is of a very heavy wide strip of iron or like material and rounded at the center to provide for the swinging of the strap.

This device is very simple in construction and is of much saving to property on account of dispensing with wooden outside frames which heretofore was necessary in order to support the hinge.

Having fully described my invention, what I claim is—

A hinge for cellar-doors, constructed of a rod bent U-shaped, said rod again bent at 6 and again at 7 forming a double right angle, said rod again bent at 8 its ends in a horizontal plane, the ends flattened, split, and spread, said spread ends adapted to be embedded in concrete, a strap carried by said rod in the U-shaped portion, and secured to the door for carrying the same, substantially as specified.

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

HENRY F. SCHWENKER.

Witnesses:

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