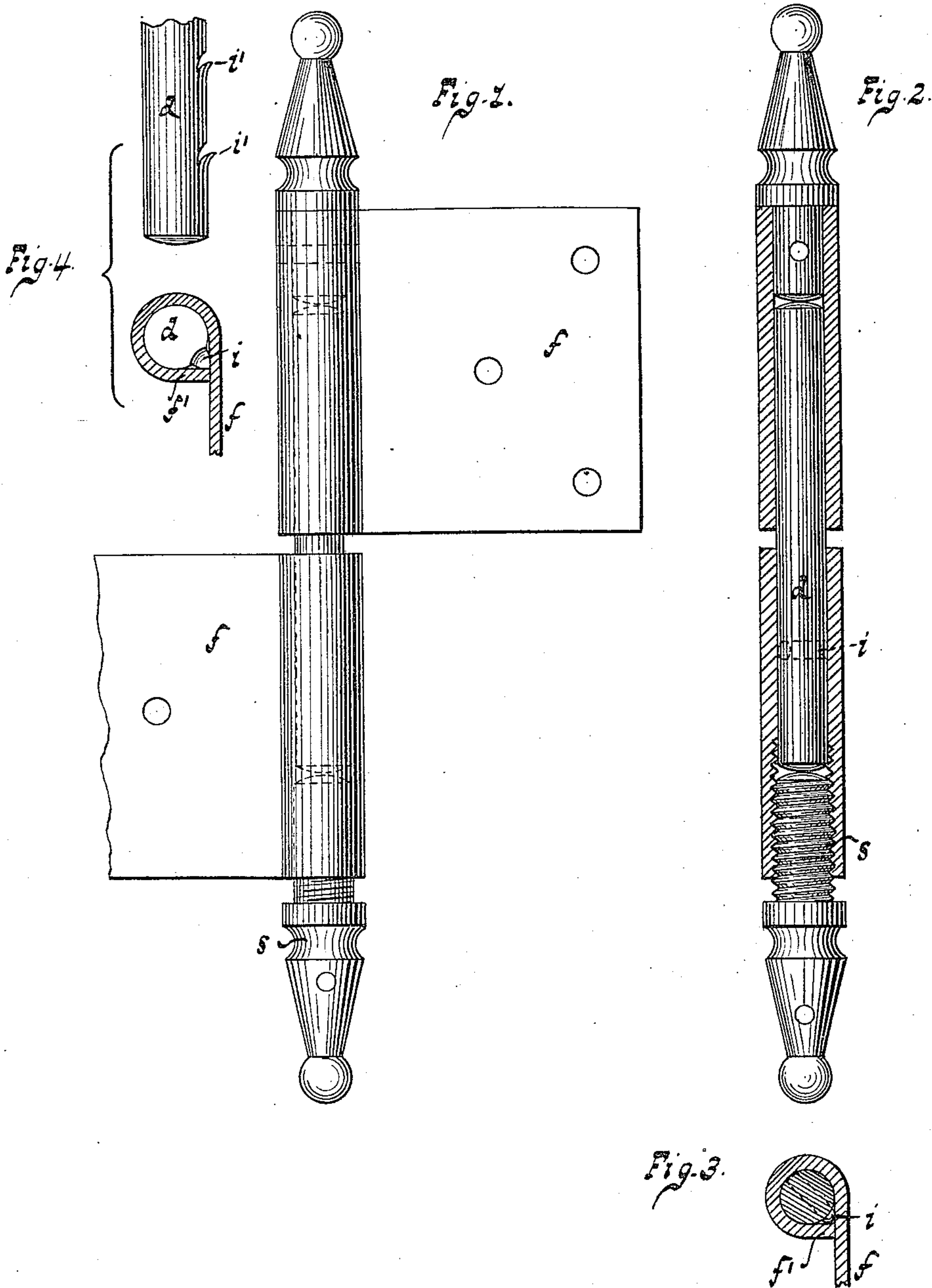


(No Model.)

K. RADLER.  
HINGE.

No. 442,547.

Patented Dec. 9, 1890.



WITNESSES:

*William Miller*  
*Edward Wolff.*

INVENTOR:

*Karl Radler.*

BY  
*Van Santvoord & Hauff*  
his ATTORNEYS

# UNITED STATES PATENT OFFICE.

KARL RADLER, OF HILDESHEIM, GERMANY.

## HINGE.

SPECIFICATION forming part of Letters Patent No. 442,547, dated December 9, 1890.

Application filed June 20, 1890. Serial No. 356,058. (No model.)

*To all whom it may concern:*

Be it known that I, KARL RADLER, a subject of the King of Prussia, residing at Hildesheim, in the Kingdom of Prussia and German Empire, have invented new and useful Improvements in Butts or Door-Hinges, of which the following is a specification.

This invention relates to such butts and door-hinges in which the door by means of a screw can be adjusted in its height—that is, raised or lowered; and the object of the invention is to secure the screw against accidental loosening which might easily occur from the frequent swinging of the door.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a hinge containing my invention. Fig. 2 is a longitudinal section of Fig. 1. Fig. 3 is a transverse section of a lower hinge-leaf. Fig. 4 shows in detail a modified form of pintle and a transverse section of a hinge-leaf.

In the drawings, the letters *ff* indicate the leaves or plates of the butt or hinge. The free ends *f'* of the leaves are bent over so as to form eyes for the reception of the pintle *d*. The pintle *d* is vertically movable in the eye of the lower leaf, and said pintle rests on a set-screw *s*. The pintle *d* can rise or fall in said lower eye, but said pintle is prevented from turning therein. For this purpose the free end *f'* is not bent so as to form an eye round in cross-section, but said end is so set against the leaf as to leave an angle for the reception of the lock or key *i*, Fig. 3. This lock or key allows vertical adjustment of the pintle, but prevents the pintle turning in the lower eye, so that no accidental rotation can be communicated by the pintle to the set-screw *s*.

The lock or key *i* can be variously formed.

In Figs. 1 to 3 the key *i* is formed by a cross-piece or stud passed into a suitable recess or opening in the pintle *d* and made to project into the angle of the eye at the free end *f'* of the leaf *f*. In Fig. 4 the lock *i* is formed by lips or tongues cut or bent out of the body of the pintle. By turning the set-screw *s* the pintle is easily adjusted for raising or lowering the door, while the engagement of the lock or projection *i* with the angle at *f'* in the lower eye prevents turning of the pintle.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the upper and lower hinge-leaves having eyes, one of said eyes being formed eccentrically, or with an angle or recess, and a pintle made to enter said eyes, of a lock or key *i* on the pintle, made to engage the angle or eccentric portion of the eye to lock the pintle against rotation, and a set-screw made to act on the pintle to adjust the same vertically, substantially as described.

2. The combination, with the upper and lower hinge-leaves having eyes, one of said eyes being formed eccentrically, or with an angle or recess, and a pintle made to enter said eyes, of a lock or key formed by suitably cutting or bending part of the pintle, said lock being made to engage the angle or eccentric portion of the eye to hold the pintle against rotation and a set-screw made to act on the pintle to adjust the same vertically, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

KARL RADLER.

Witnesses:

ADOLF KANN,  
MAX EPSTEIN.