

(No Model.)

G. K. ORRELL.

PILLOW BLOCK.

No. 258,312.

Patented May 23, 1882.

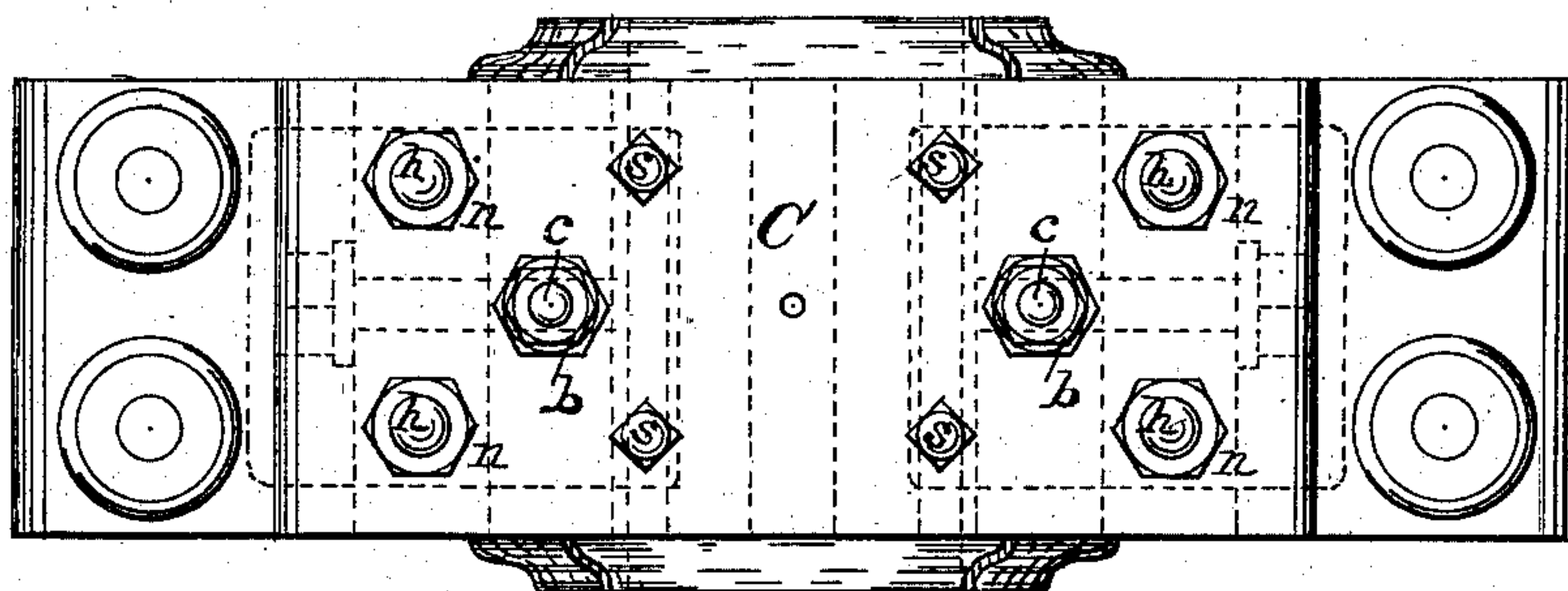


FIG-1-

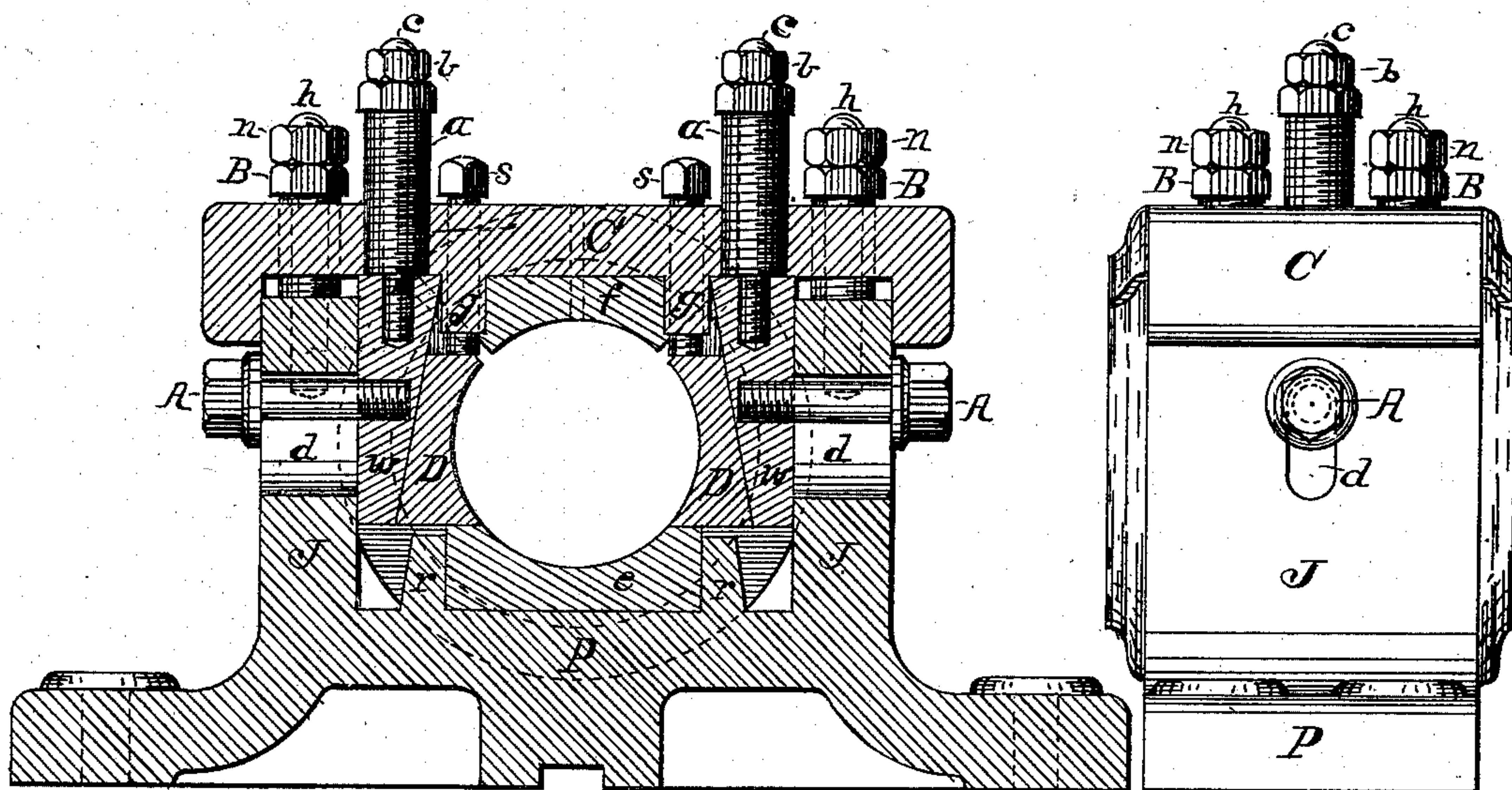


FIG-3-

FIG-2-

WITNESSES—

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—*J. L. Thomson*—

INVENTOR—

—*George K. Orrell*—
—*per Duell, Laessle & Hy*—
—*his Atty.*—

UNITED STATES PATENT OFFICE.

GEORGE K. ORRELL, OF OSWEGO, NEW YORK.

PILLOW-BLOCK.

SPECIFICATION forming part of Letters Patent No. 258,312, dated May 23, 1882.

Application filed April 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, GEORGE K. ORRELL, of Oswego, in the county of Oswego, in the State of New York, have invented new and useful Improvements in Pillow-Blocks, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

The nature of this invention consists in certain novel, simple, effective, and convenient means for adjustably securing journal-bearings in their position in relation to the journal, as hereinafter fully described, and specifically set forth in the claims.

In the accompanying drawings, Figure 1 is a top view of a pillow-block provided with my improvements. Fig. 2 is a side view of the same, and Fig. 3 is a vertical transverse section taken through the center thereof.

Similar letters of reference indicate corresponding parts.

P denotes a pillow-block or base of a journal-box of a horizontal revolving shaft. From said base rise two jaws, J J, across the top of which is secured the cap C, the whole forming a box, in which the journal-bearings—sometimes designated “brasses”—are arranged. The bottom bearing, e, is seated upon the upper or inner face of the base P, and secured against lateral displacement by ribs r r on said base abutting against the sides of the bearing e. The side bearings or cheek-pieces, D D, rest upon the two side edges of the bottom bearing, e, to form a continuous bearing with the same. The rear face of the side bearings, D, is beveled or inclined inwardly from the bottom to the top, and between the back of the bearings D and inner face of the adjacent jaw J is inserted a wedge, w, which is extended the length and depth of the said bearing. The top bearing, f, is applied to the under side of the cap C and fitted between longitudinal ribs g g on the cap.

Numerous devices have been resorted to to obtain the requisite adjustment of the aforesaid bearings for compensating for the wear of the same and taking up the lost motion of the journal; but thus far none have afforded the necessary accuracy and convenience for effecting the aforesaid adjustment and of maintaining the parts in their adjustment. I effect the

aforesaid adjustment by the following instrumentalities:

In the top of the jaws J, I rigidly secure upward-projecting stud-bolts h, which are screw-threaded at their extremity. Over each of the stud-bolts h is slipped a loosely-fitted hollow bolt, B, which is screw-threaded externally and works in a correspondingly-threaded eye through the cap C, and rests with its lower end on the top of the jaw J. The upper extremity of the hollow bolt B is provided with a square or hexagon head for the application of a wrench, and above this head the stud-bolt h is provided with a nut, n. The cap C is thus supported by the hollow bolt B and adjusted to bring the top brass or bearing, f, properly onto the top of the journal by first slacking the nut n and then turning the bolt B so as to run it up and allow the cap to settle and bring the brass f to properly bear on the top of the journal. After this is effected the bolt B is turned down to barely bring its bottom to touch the top of the jaw, and is so retained by turning down the nut n on the stud h. The side bearings or cheek-pieces, D, I adjust by means of a stud, c, rigidly attached to the top of the wedge w and loosely extended through a hollow bolt, a, which works in a screw-threaded eye in the cap C, and is similar to the hollow bolt B, before described. A nut, b, on the upper end of the stud c serves to draw the wedge w up against the lower end of the hollow bolt a. A set-screw, A, passing horizontally through a vertical slot, d, in the jaw J and engaging a screw-threaded socket in the back of the wedge w, assists the bolt a and stud c in holding the wedge in its desired position.

The operation of the adjustment of the cheek-pieces D is as follows: First slack set-screw A. Then screw down the hollow bolt a until the brass or cheek-piece D has obtained a proper bearing on the side of the journal. Then lock it in its position by tightening the nut b and set-screw A.

In order to steady the brasses or bearings D D and more effectually prevent their lifting and rattling, I insert through the cap C set-screws s, bearing on top of the brasses D.

It will be observed that the described construction and combination of bolts and set-

screws afford a very convenient and positive means for accurately adjusting the several journal-bearings so as to take up all lost motion and maintain the shaft in perfect line.

5 Having described my invention, what I claim is—

1. In combination with the journal-box base P, jaws J, and cap C, the stud *h*, fixed to the jaws, the hollow bolt B, fitted loosely over the
10 stud and working in a screw-threaded eye in the cap, and the nut *n* on the end of the stud, as set forth and shown.

2. In combination with the journal-box base P, jaws J, cap C, cheek-pieces D, and wedge
15 *w*, the studs *h* and *c*, fixed respectively to the jaws and to the wedge, the hollow bolts B and *a*, slipped loosely over the respective studs and working in threaded eyes in the cap, and the
20 nuts *n* and *b*, applied respectively to the extremities of the studs, substantially as described and shown.

3. In combination with the journal-box base

P, jaws J, cap C, cheek-pieces D, and wedge *w*, the studs *h* and *c*, hollow bolts B and *a*, nuts
25 *n* and *b*, and the set-screws A, all as shown and set forth.

4. In combination with the journal-box base P, jaws J, cap C, bottom bearing, *e*, and wedge
30 *w*, the cheek-piece D, resting on the bottom bearing, *e*, and the set-screw *s*, working in the cap C and bearing on top of the cheek-piece, substantially as described and shown.

In testimony whereof I have hereunto signed my name and affixed my seal, in the presence
35 of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 25th day of March, 1882.

GEORGE K. ORRELL. [L. S.]

Witnesses:

C. H. DUELL,

WM. C. RAYMOND.