

(No Model.)

C. KAHLER.

JOURNAL BOX.

No. 298,859.

Patented May 20, 1884.

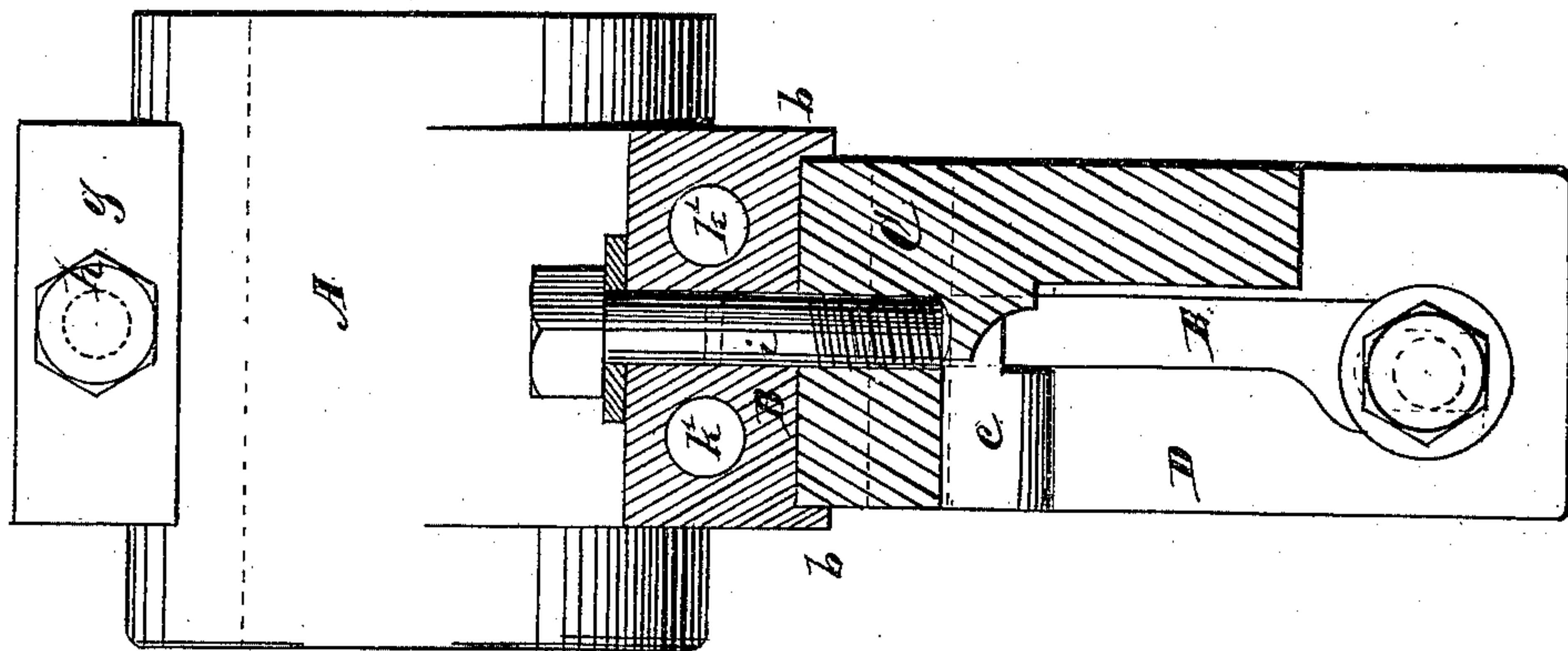


Fig. 2.

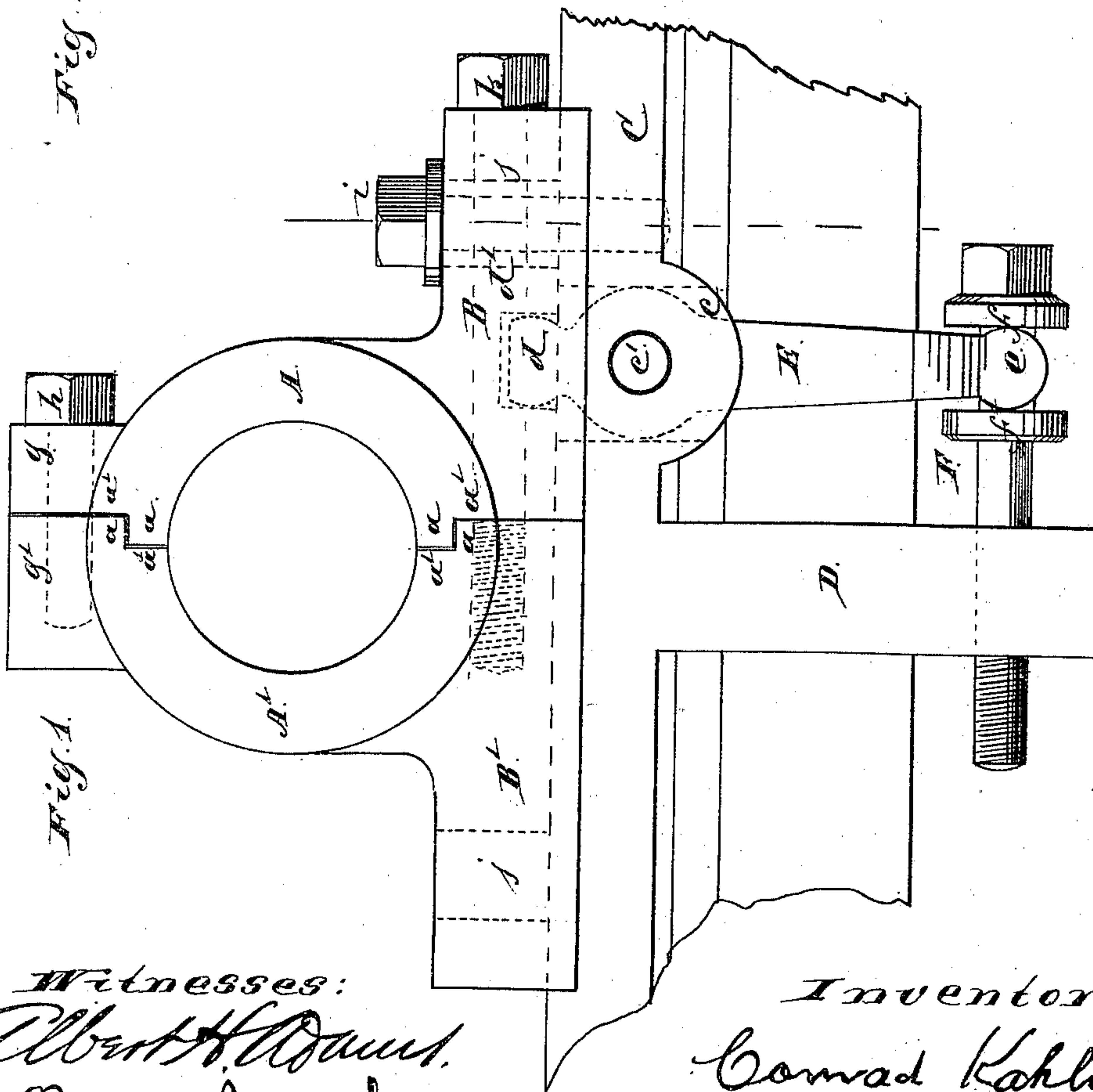


Fig. 1.

Witnesses:

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UNITED STATES PATENT OFFICE.

CONRAD KAHLER, OF CHICAGO, ILLINOIS.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 298,859, dated May 20, 1884.

Application filed March 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, CONRAD KAHLER, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Journal-Boxes, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is an end elevation of the journal-box; Fig. 2, a side elevation with the base and guide-rail in section.

This invention is primarily designed for use on printing-presses to adjust and maintain the printing and blanket cylinders and the cutting-cylinders in proper relation to each other as the bearings wear in use; but it can be used in other machines and places where it is desirable to maintain the same relative arrangements between the parts, and take up the wear in use, and prevent horizontal or side play; and its nature consists in dividing the journal-box vertically instead of horizontally, so as to have the side-pressure uniform and constant, and in the several parts and combinations of parts hereinafter described, and pointed out in the claims as new.

In the drawings, A A' represent the half-boxes forming the journal-boxes. These half-boxes are divided vertically, instead of horizontally, the adjoining ends of each half-box having, respectively, projections *a* and openings *a'*, the projections passing each other, as shown in Fig. 1. The half-box A has an upward-projecting ear, *g*, and the half-box A' has a corresponding ear, *g'*, in which is a screw-threaded opening to receive the stem of a bolt, *h*.

B B' are the bases of the respective half-boxes A A' in the form of construction shown. Each base has downwardly-projecting lips *b*, to form a groove for the frame or guide-rail on which the journal-box is mounted.

C is the top or guide rail of the frame-work of the machine, which may be formed as shown, or in some other suitable manner to suit the machine with which it is used. The top or guide rail has screw-threaded openings to receive the ends of bolts *i*, which bolts pass through openings *j*—one in each half-box—which openings are wider longitudinally than the diameter of the bolt, so as to permit of a

longitudinal movement of each half-box independently, or of both half-boxes together.

D is a pendant or arm depending from the top rail, C, of the frame in line, or nearly so, with the journal-box.

E is an arm or lever pivoted by a suitable pin or pivot, *e'*, in the ear *c* on the rail C, and having its upper end, *d*, engaged in a recess, *d'*, in the base B of the journal-box, and having its lower end, *e*, located between collars on a bolt, the stem of which enters a screw-threaded opening in the lower end of D, as shown in Fig. 4, so that by turning the bolt the arm or lever E can be turned to move the journal-box forward or back on the top rail of the frame, and this movement of the journal-box is permitted by reason of the bolts *i*, which attach it to the top rail, passing through the slots *j* in the base B B', as shown by the dotted lines in Fig. 1.

F is the adjusting-screw for moving the lever E. One end of this screw enters the pendant D, and has a screw-thread thereon, and the other end has a head, *f*, and a collar, *f'*, between which the end *e* of the lever is located.

These journal-boxes, divided vertically, as shown in Figs. 1 and 2, are to be used for the shafts of the printing and blanket cylinders and the shafts of the cutting-cylinders of a printing-press, and for other rollers or cylinders where it is desired to have the two cylinders or rollers which coact maintain a close relation to each other, and have the wear in use compensated for, so as to prevent any horizontal play that would interfere with the proper coacting of the cylinders. The custom heretofore has been to divide half-boxes for journal-boxes horizontally, and the result has been that the wear vertically can be taken up, but the wear in a horizontal direction is not compensated for, allowing horizontal play of the shafts, which prevents the cylinders from coacting snugly, and by dividing the journal-boxes vertically the horizontal wear, as well as the vertical wear, can be compensated for, as the projections *a* can be filed away to compensate for the horizontal wear by allowing the half-boxes to be brought closer together. The journal-boxes, through the arm or lever E, can be adjusted forward and back, as re-

quired, to produce the proper degree of compression and the required amount of pressure between the coacting cylinders or rollers, and to adjust such coacting cylinders or rollers in their proper relation to each for the required work. The half-boxes, as shown, are held together by the bolt *h* at the top and the bolts *k*, which pass horizontally into the base-pieces through holes *k'* in the base *B* and into screw-threaded holes in the base *B'*.

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

1. A journal-box consisting of two half-boxes divided vertically, to enable wear to be taken up and prevent horizontal play, substantially as specified.

2. A journal-box consisting of two half-boxes, each having a lip or projection and a cut-away portion, *a'*, having a base, and means

for connecting the half-boxes together, substantially as specified.

3. The half-boxes *A A'*, each having a lip, *a*, and cut-away portion *a'*, base *B B'*, and ears *g g'*, in combination with the bolts *h* and *k*, substantially as and for the purpose specified.

4. The half-boxes *A A'*, constructed as described, base *B B'*, ears *g g'*, and bolts *h k*, in combination with the guide-rail *C* and bolts *j*, substantially as and for the purposes specified.

5. The half-boxes *A A'*, base *B B'*, and guide-rail *C*, in combination with the pendant *D*, lever *E*, and adjusting-bolt *F*, substantially as and for the purpose specified.

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Witnesses:

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