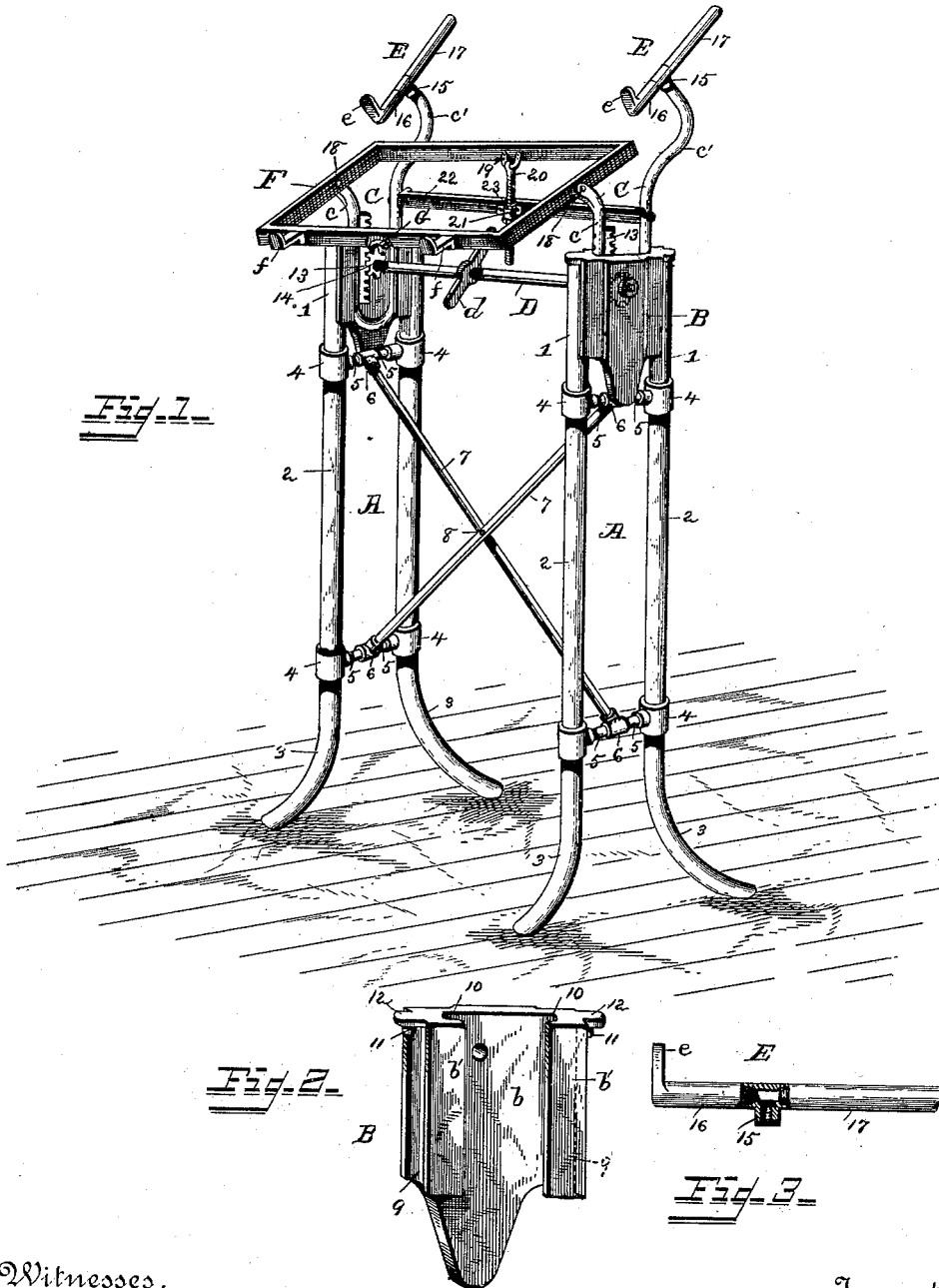


(No Model.)

W. P. HARMONY.
TYPE CASE STAND.

No. 383,292.

Patented May 22, 1888.



Witnesses,

Albert Speiden.
G. W. Balloch.

Inventor,

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By his Attorney,

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UNITED STATES PATENT OFFICE.

WILLIAM P. HARMONY, OF SIDNEY, OHIO.

TYPE-CASE STAND.

SPECIFICATION forming part of Letters Patent No. 383,292, dated May 22, 1888.

Application filed September 12, 1887. Serial No. 249,461. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. HARMONY, a citizen of the United States of America, residing at Sidney, in the county of Shelby and State of Ohio, have invented certain new and useful Improvements in Type-Case Stands, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to type-case stands; and it has for its object the production of a neat, cheap, and durable stand, so constructed as to enable the compositor to easily and conveniently raise or lower the upper and lower cases simultaneously, and also to give the lower case any desired inclination to and independently of the upper case.

The invention will first be described in connection with the accompanying drawings, and then pointed out in the claims.

Figure 1 of the drawings is a perspective view of the stand, the lower-case frame being broken in front to show one of the pawls. Fig. 2 is perspective view of one of the cast side blocks. Fig. 3 is an elevation of one of the rods which support the upper case, the T for connecting it with the standard being in section.

The legs A (and in fact all other portions of the stand except those described as made of other material) are made from gas-pipe, each being in three pieces, 1 2 3, having screw-threaded ends, and these pieces are connected together by means of interiorly screw-threaded T's 4. Rounds 5, one end of each of which is screwed into one of the T's 4 and the other end into another T, 6, connect the legs of each pair together, and diagonal cross-braces 7, screwed into the T's 6, connect and brace the two pairs of legs. At the point of crossing these braces are secured together by a bolt, 8, and nut, the latter not seen. The lower ends of the legs are preferably bent outward to give the stand a firm bearing on the floor.

B represents the side blocks, in which the operating-shaft is journaled, and in which the case-standards are supported and guided. These blocks are of cast metal, and of the shape clearly shown in Fig. 2, wherein is illustrated a casting the back part, *b*, of which is plain, and from which part, on the inner side, extend inward two projections, *b'* *b'*, which are each

grooved on two sides, as at 9 10. The blocks are located between the upper ends of the legs at each side of the stand, as seen in the drawings, and the grooves 9 in the projections are of a depth to embrace about half the diameter of the legs A. A pin, 11, cast on the under side of a lug, 12, formed at the top of each projection, takes into the top of each leg, and serves to aid in holding the block in position, the block being otherwise held by the legs, which are drawn tightly against it by the rounds.

C represents the standards for the cases. Each of these standards consists of a single piece of pipe bent into V shape, and adapted to fit neatly in the grooves 10 in the projections of the blocks. To the inner side of the front arm, *c*, of each of these standards is secured a rack-bar, 13, with which a pinion, 14, near each end of a shaft, D, journaled in the blocks B, engages, said shaft being revolved to raise or lower the standards and the cases to be mounted on them by means of a handle, *d*, keyed to it. The rear arms, *c'*, of standards C are longer than the front arms, and are bent rearwardly and upwardly, so as to stand in proper position for supporting the upper case. Each of these arms at its upper end screws into a T, 15, into which T are also screwed the supports E, on which the upper case rests. Each of said supports is formed in two pieces, 16 17, of gas-pipe, and they have their lower ends turned upward to form abutments *e* for the case to rest against, all as clearly shown in Fig. 3.

F represents the frame on which the lower case rests. This frame, which is rectangular in shape, is constructed of light bar-iron, and is pivoted, as at 18, to the upper ends of arms *c* of standards C. It is provided on its front side with rigidly-attached abutment-pieces *f*, for the case to rest against. In order to make this frame adjustable as to inclination, so as to enable the compositor to give his lower case any desired pitch, I secure a metallic staple, 19, to the rear portion of the frame, on which staple is hung a screw-threaded rod, 20, which passes through a metallic loop, 21, secured to a cross-bar, 22, on arms *c'* of standards C, and on this rod, above and below the loop, I place screw-threaded nuts 23.

G represents pawls (only one of which is

seen) pivoted to and near the top of the blocks B, on the inner side, for the purpose of engaging with the teeth of the pinions 14, to hold the cases at any desired elevation.

- 5 The manner of operating my stand to adjust the height of both cases simultaneously, and also to give to the lower case any desired inclination with relation to the upper case, will be apparent on inspection of the drawings, and therefore description is deemed unnecessary.

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

- 15 1. In an adjustable type-case stand, the combination, with a transverse shaft journaled in the upper portion of the stand, and provided with a pinion near each end and an operating-handle, of a two-arm standard at each side of the stand, supports secured to the rear arms of said standards for holding the upper case, and a frame pivoted to the front arms for supporting the lower case, a rack-bar secured to one of the arms of each standard, with which the pinions engage, and mechanism, substantially as described, for holding the standards elevated.

- 20 2. In an adjustable type-case stand, the combination, with the legs, rounds, and cross-braces, constructed substantially as described, of the side blocks, grooved as at 9 and 10, clamped between the upper ends of each pair of legs, and provided with pins for taking into the tops of the legs, a transverse shaft jour-

naled in said blocks, and provided with a pinion near each end and an operating-handle, a two-arm standard at each side of the stand, each formed from a single piece of metal bent so as to fit and work in grooves 10 in the side blocks, supports secured to the rear arms of said standards for holding the upper case, and a frame pivoted to the front arms for supporting the lower case, a rack-bar secured to one of the arms of each standard, with which the pinions engage, and mechanism, substantially as described, for holding the standards elevated.

3. In an adjustable type-case stand constructed as described, the combination, with a cross-brace uniting the rear arms of the standards which support the upper case, and provided with a loop, of a rectangular frame on which the lower case rests, pivoted to the front arms of the standards, a staple secured to the rear part of said frame, a screw-threaded rod hung to said staple and passing through the loop on the cross-brace, and screw-threaded nuts on said rod, above and below said loop, whereby the lower case may be adjusted to and held at any desired inclination with relation to the upper case.

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

WILLIAM P. HARMONY.

Witnesses:

FERDINAND LEIRMAN,
S. J. HATFIELD.