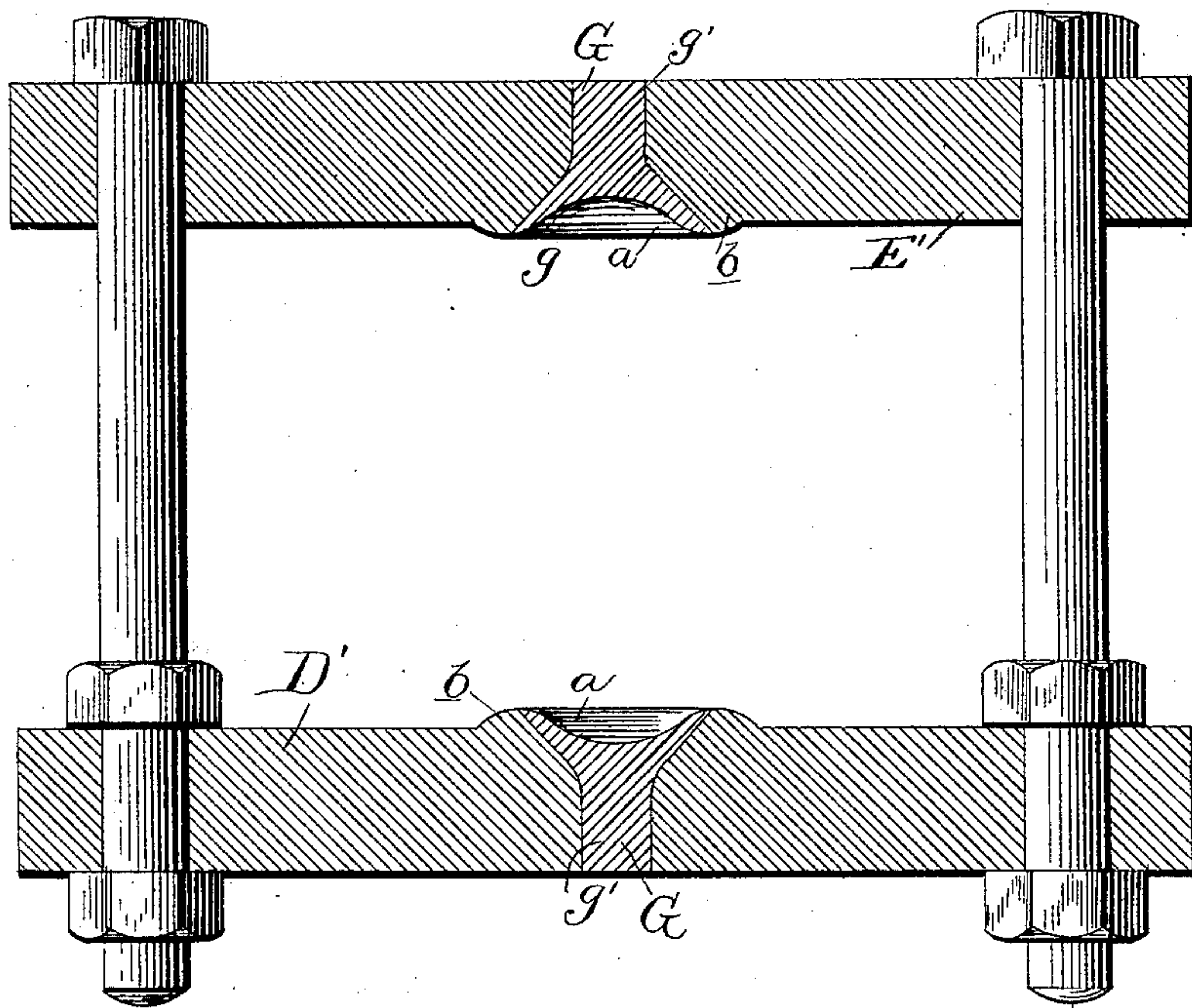


(No Model.)

C. H. HUGGETT.
PLATFORM SCALE.

No. 452,606.

Patented May 19, 1891.



Witnesses
Thos. E. Robertson.
Milton A. White.

Inventor
Charles H. Huggett
By J. W. Robertson
Attorney

UNITED STATES PATENT OFFICE.

CHARLES H. HUGGETT, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE E. & T.
FAIRBANKS & COMPANY, OF ST. JOHNSBURY, VERMONT.

PLATFORM-SCALE.

SPECIFICATION forming part of Letters Patent No. 452,606, dated May 19, 1891.

Application filed February 10, 1890. Serial No. 339,839. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. HUGGETT, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Weighing-Scales, of which the following is a specification.

In heavy weighing-scales certain levers are provided with laterally-projecting points of steel or other very hard metal, which bear in cup-shaped depressions formed in the surface of the metal bars or plates against which the levers act. Both the steel points of the levers and the cup-shaped cavities in the bars are subject to great friction and wear. It has been common to make the steel points detachable and removable to enable them to be readily and cheaply renewed from time to time as they wear out. It has also been common to make the bearing-surface of the depressions harder than the body of the bars; but, so far as I am aware, no practical means has hitherto been devised whereby the depressed surface could be made detachable and removable, so that a new one could be readily substituted when an old one had become worn. Formerly it was the custom to prepare a block having the proper depression and cast the bar around it so as to leave the depressed surface exposed; but that method being objectionable, manufacturers afterward resorted to the expedient of forming the bar with a recess and welding into the recess a block having the proper surface depression, which has continued to be the procedure until superseded by my present invention.

In this invention the depressed surface is formed on a separate piece of metal of suitable hardness provided with a retaining-stem and fitted into a socket made in the bar having the proper shape to receive it. In this position the loose metal piece is held from rocking and from lateral movement by the stem, and when the parts are assembled is kept in place by the pressure of the lever bearing against it. It is therefore readily detachable at any time for the purpose of inserting a new block.

The drawing illustrates the preferable

form in its application to the stirrup, shackle, or steel yard connection of the Fairbank scales, on which the invention is now in use.

E' D' are the metal bars of the shackle, and G the loose removable block. The latter in its preferable form resembles the head and neck of an ordinary wood-screw, except that it has a proportionately larger head and has a cup-shaped depression *a*, instead of a groove, in its outer end. The enlarged head is shown at *g* and the stem at *g'*. The metal of the bar behind the enlarged head gives the block a firm support against the force of the lever, and the stem guides the block to its seat and holds it from rocking and lateral displacement. The bar, if slightly enlarged around the block, as shown at *b*, is not rendered weak by the removal of metal to form the socket, and by extending the stem through the bar, as shown, the block can be readily knocked out by the blow of a hammer, if it should happen to stick.

The invention is simple; but it supplies a long-felt want and effects the saving of a considerable item in cost of manufacture and in expense of repairs.

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

1. The improvement in weighing-scales herein described, consisting of a bar perforated to form a socket, and a removable block G, having an enlarged head *g* and a retaining-stem *g'*, tightly fitting the hole in said socket and hollowed out to receive the bearing-point of the lever, substantially as described.

2. The herein-described improvement in weighing-scales, consisting of a bar having a countersunk socket with a projection surrounding said socket, and a removable block G, having an enlarged head *g* and a retaining-stem *g'*, tightly fitting the hole in said socket and hollowed out to receive the bearing-point of the lever, substantially as and for the purpose set forth.

CHARLES H. HUGGETT.

Witnesses:

H. BITNER,

T. S. E. DIXON.