

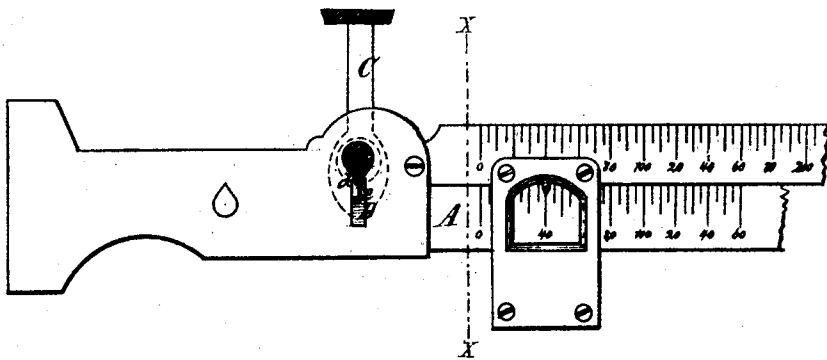
*J. H. Usher,*

*Scale Beam.*

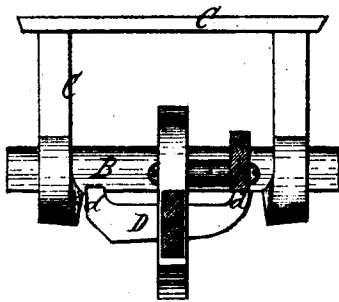
*No. 108,654.*

*Patented Oct. 25, 1870.*

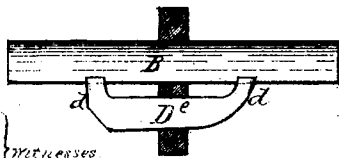
*Fig. I.*



*Fig. II.*



*Fig. III.*



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*his attys*

# United States Patent Office.

JOHN H. USHER, OF BUFFALO, NEW YORK, ASSIGNOR TO "THE BUFFALO AND NIAGARA SCALE-WORKS COMPANY," OF SAME PLACE.

Letters Patent No. 108,654, dated October 25, 1870.

## IMPROVEMENT IN SCALE-BEAMS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN H. USHER, of the city of Buffalo, in the county of Erie and State of New York, assignor to THE BUFFALO AND NIAGARA SCALE-WORKS COMPANY, of the same place, have invented a certain Improvement in Weighing-Scales, of which the following is a specification.

My invention relates to the manner of constructing and inserting the key commonly employed to fasten the pivot-pin in scale-beams, and secure the beam against lateral movement in the supporting-yoke; and

It consists of a key formed with upturned ends, in combination with a key-seat cut through the beam apart from the hole for the reception of the pivot-pin, the object being to obtain a greater bearing in the key-seat, and to permit the use of a larger key, and the driving it to its place independently of the pivot-pin.

In the accompanying drawing—

Figure I is a side elevation.

Figure II is a cross-section of the beams, in line *a a*.

Figure III is a cross-section of the beam, showing the pivot-pin and stop as arranged therein.

Like letters of reference designate like parts in each of the figures.

A is the main beam of any ordinary weighing-scale;

B is the pivot-pin;

C, the supporting-yoke: and

D, my improved key, arranged in a key-seat, *e*, in the beam underneath and separate from the pivot-hole.

The ends of this key are provided with arms *d d*, which project upward in contact with the edge of the pivot.

These arms, at the point of contact, are preferably formed with a notch, to receive the edge of the pivot, which renders the connection between them more secure.

The ends of the key are beveled, as heretofore, so as to bear against the sides of the yoke and secure the beam against lateral movement.

My improvement is more important for scale-beams of large size, which require long pivot-pins and wide yokes to secure lateral steadiness, for it enables the cross-sectional dimensions of the key to be increased in proportion to its length, beside the other advantages before enumerated.

### Claim.

I claim—

The key D, formed with upturned ends *d d*, in combination with the pivot-pin B and separate key-seat *e*, as hereinbefore set forth.

JOHN H. USHER.

Witnesses:

JAY HYATT,

JNO. J. BONNER.