

J. E. Ball,

Buckle,

No 20,246,

Patented May 18, 1858.

Fig. 1.

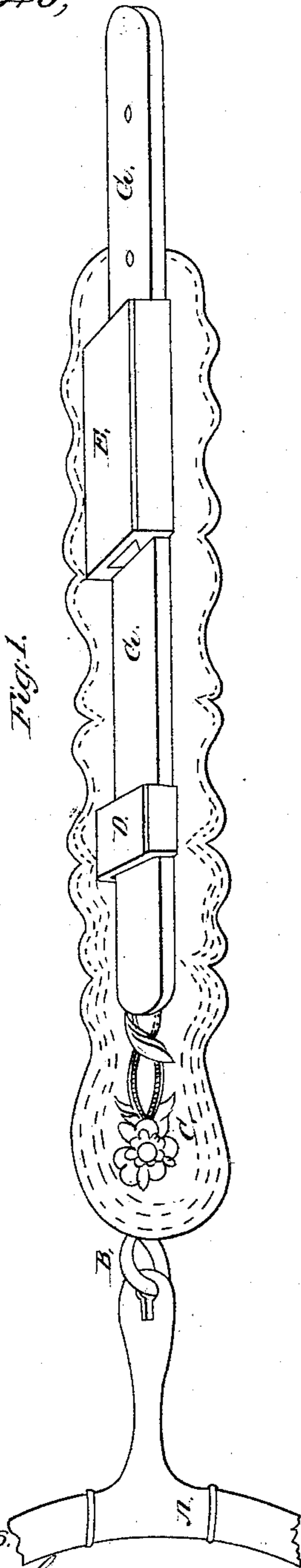


Fig. 2.

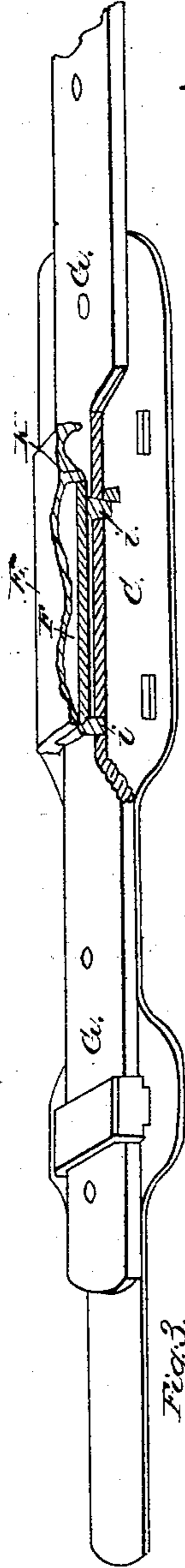


Fig. 3.

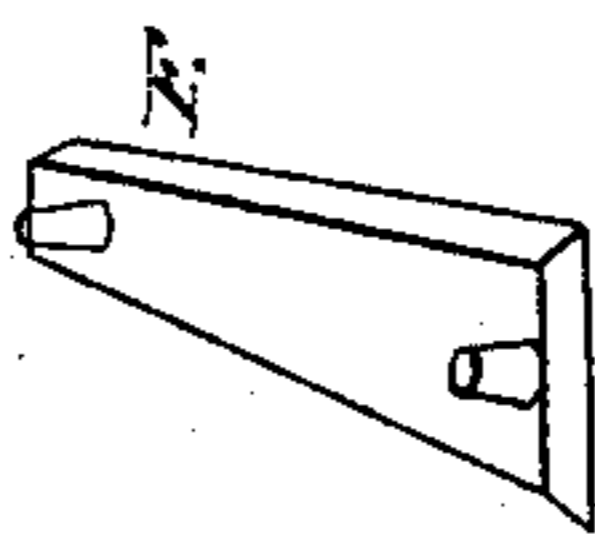


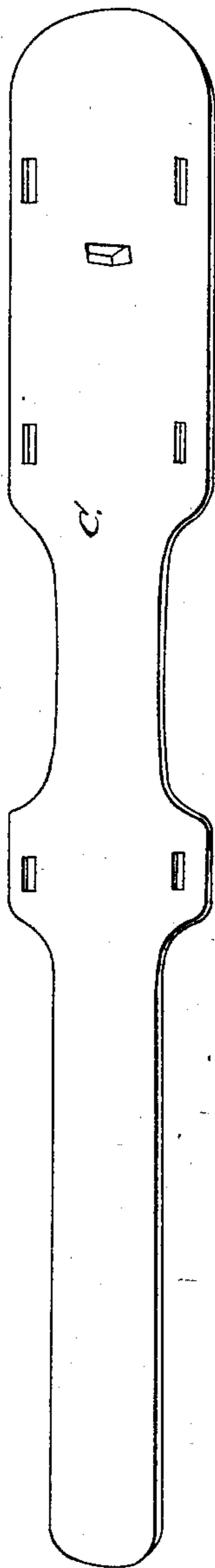
Fig. 4.



Fig. 5.



Fig. 6.



Witnesses,

Mo Whitehead
E. P. Higgins

Inventor,

Joseph E. Ball

UNITED STATES PATENT OFFICE.

JOS. E. BALL, OF NEWARK, NEW JERSEY.

FASTENING FOR HAME-TUGS.

Specification of Letters Patent No. 20,246, dated May 18, 1858.

To all whom it may concern:

Be it known that whereas I, JOSEPH E. BALL, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful improvements in the mode of attaching the traces of harness for horses to the draft plates or straps which are attached to the same, and whereas I have presented my petition for Letters Patent, I now, in order that the nature of my invention may be fully understood and so as to enable any person skilled in the art or science to which it appertains or with which it is most nearly connected to make and use the same, proceed to describe the same, and for that purpose I have annexed hereto drawings of the same, to which said drawings I refer.

Figure 1 is a perspective view showing a portion of the hame A and draft B, which are attached to the draft plate C, which is covered with ornamental leather. Letter D represents a small loop or keeper, E a large loop provided with a groove and stop to receive and secure the dovetailed, tapering slide or key F. G represents a portion of the leather trace which is held in its place by means of the tapering dovetailed key F and loop E above mentioned. Fig. 2 is also a perspective view showing the draft plate C, without the leather covering, and the small loop D, together with a vertical section of the large loop E and key F which is provided with two projections on its under side as shown at i and i^1 , projection i being a little shorter than projection i^1 , so that i^1 may pass through the trace in order to strike against the projection upon the upper surface of the draft plate C when the key F is drawn home or in the position shown at Figs. 1 and 2. The large loop is also provided with a stop K which secures the small end of the dovetailed key F at the same time that the projection i^1 comes in contact with the projection on the upper surface of the draft plate C. Figs. 3, 4 and 5, represent the bottom, the front or large end, and the top of the tapering dovetailed key F. Fig. 6 represents the draft plate alone showing the projection or stop upon its upper surface.

The advantages of my invention over the ordinary mode of attaching traces to the draft plates or eyes of harness are these:
First, it does away with the tedious process

of buckling and unbuckling the heavy leather traces, at the same time saving a great amount of labor necessary to sew on the buckles, keepers, &c.; second, it saves much wear and tear by the trace being kept in its place, and being so easily adjustable when required to be lengthened or shortened, and third, it prevents any lateral wear or strain upon the trace, thereby preventing its being broken off at the buckle, which is more or less the case in any of the ordinary modes of attaching the traces to the harness.

By my arrangement it is not necessary to bend the trace at all, but simply take out the dovetailed slide or key, then push the trace through the loops, D and E any desired length, and replace the projections i and i^1 , on the dove tailed key, in the holes made to receive them in the trace G, which are similar to the holes made to receive the tongue of the buckle that is in common use. The trace is then drawn through the loop E until the key F passes into that loop E, where it is secured in its place by means shown at Figs. 1 and 2, thus producing a more perfect, and secure fastening of the trace at less labor, with less liability to wear and tear and at less cost than by any other known process.

The novelty of my invention is not in the individual or separate parts of the above described arrangement for fastening traces to the draft straps of harness, as they are all well-known mechanical devices; but the mode of attaching by means of those devices when combined as above set forth I believe to be novel and useful; therefore

What I claim as new and what I wish to secure by Letters Patent of the United States is—

The combination of the loop E, the dovetailed slide or key F, the projections i and i^1 and plate C, arranged and operated in the manner and for the purpose as herein and by the said drawings, which are hereto annexed, substantially shown and described.

Witness my hand this eighth day of April one thousand eight hundred and fifty eight.

JOSEPH E. BALL.

Witnesses:

JNO. WHITEHEAD,
E. P. HIGGINS.