

E. Reid,

Journal-Box Protector,

No 3,595,

Patented May 25, 1844.

Fig 1

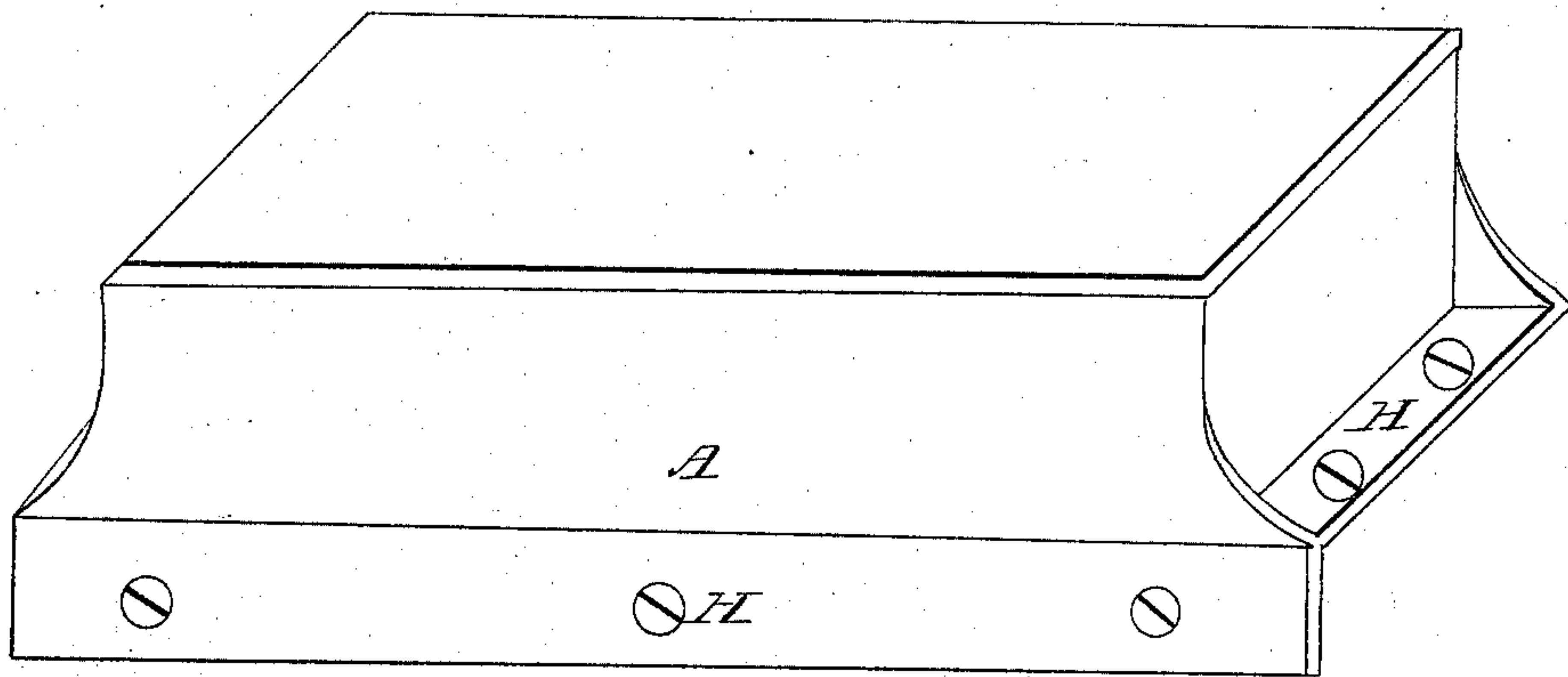


Fig 2

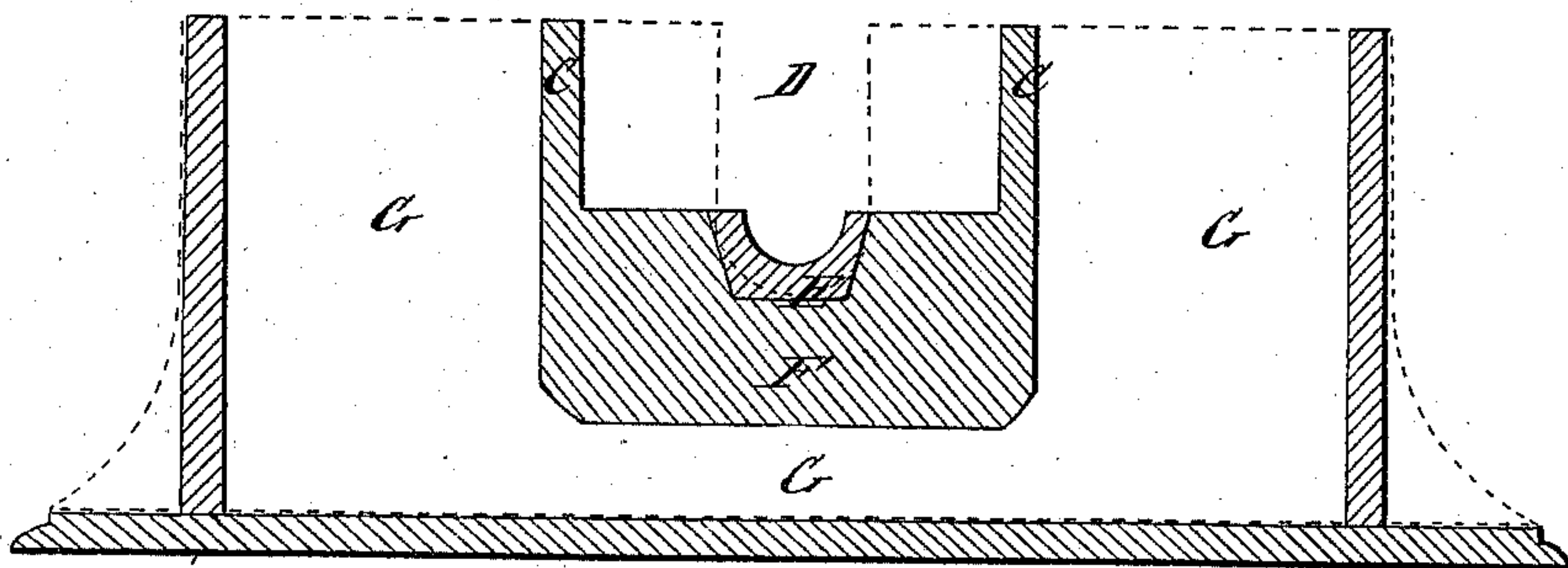
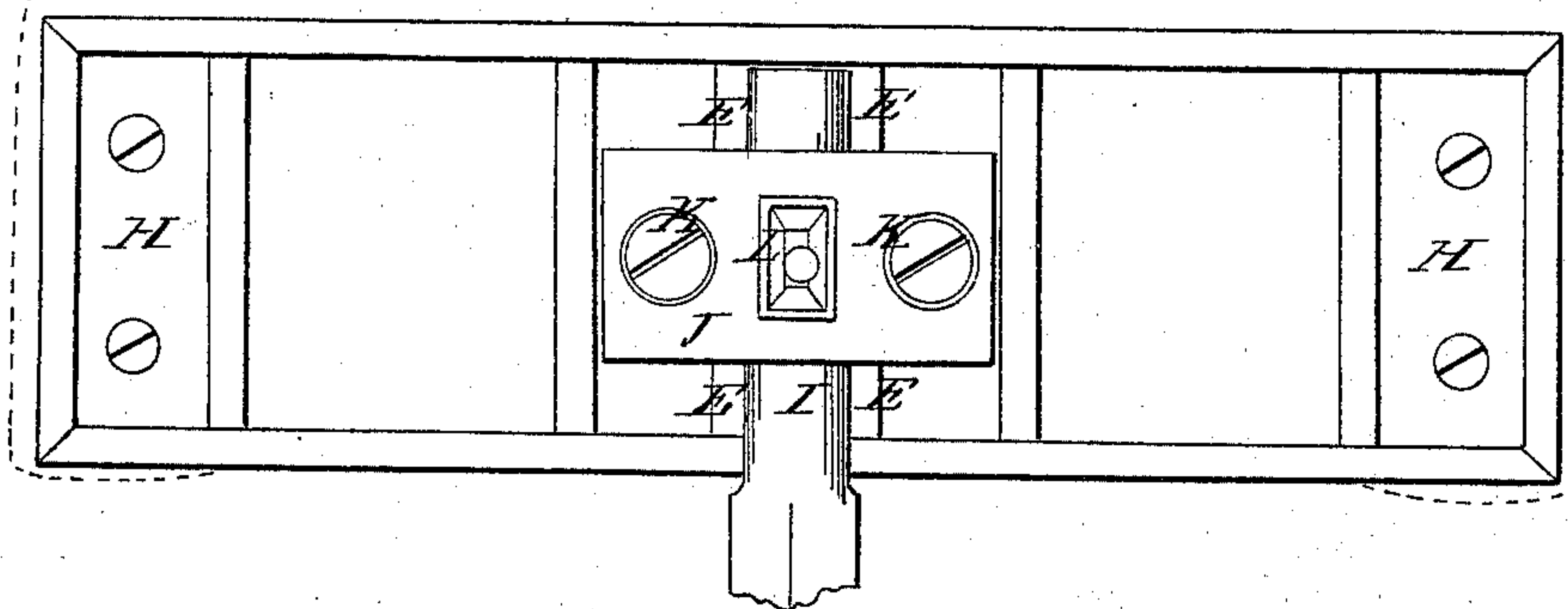


Fig 3



UNITED STATES PATENT OFFICE.

ELISHA REID, OF COLUMBUS, GEORGIA.

METHOD OF PREVENTING JOURNALS FROM HEATING.

Specification of Letters Patent No. 3,595, dated May 25, 1844.

To all whom it may concern:

Be it known that I, ELISHA REID, of Columbus, in the county of Muscogee and State of Georgia, have invented a new and
5 useful Improvement for preventing the journals and boxes or bearings thereof from heating and wearing, which I denominate a "combination-box;" and I do hereby declare that the following is a full, clear, and
10 exact description thereof, reference being had to the accompanying drawing, which forms a part of this specification in which—

Figure 1 is a perspective view of my improved bearings; Fig. 2, a vertical section
15 through it, and Fig. 3, a top plan, with the cover removed.

The nature of my invention consists in surrounding the box or bearing of a journal with water by means of a reservoir in which
20 said box is placed, thus keeping the parts subject to friction, cool which prevents the oil from drying up or gumming so readily as is usual and thereby preventing the necessity of frequent oiling and the dangerous
25 consequences of swift running machinery by the heating of journals and boxes.

This improvement I consider particularly applicable to the saw cotton gin.

Its construction is as follows: An oblong
30 box is made of cast iron or other suitable material the outside of which is shown at Fig. 1, A, and G, Fig. 2, represents the interior thereof; the bottom of this box projects at each end forming a flanch H by
35 which it can be screwed to its place in the machine and one of the sides may also project down below the bottom to receive an additional number of screws as shown at H' Fig. 1. In the box A a cup or bearing F

is cast which extends across from side to 40 side, where it is connected, leaving a space between it and the bottom and ends of the box; the sides C of this cup extend up to the top of the box; so that when the box G, G, G, is filled with water, it shall be 45 kept out of the bearing; a composition box E is put into the cup F in the usual way; the composition which I prefer for it being ten parts of tin and one of copper but pure block tin or even lead will answer. 50 One side of the outer box A is cut down to the bearing E as shown by the dotted lines a, a, Fig. 2 for the purpose of admitting the journal I of the shaft. A cap J Fig. 3, is screwed down upon the bearing by screws 55 K, it is of common construction, having a hole through it at L for the purpose of oiling the journal. A cap O, fits over the whole top of the box A, and keeps out grit or other dirt from getting into the working 60 parts.

What I claim as my invention and desire to secure by Letters Patent is—

The prevention of heating of journals and boxes by surrounding them with a reservoir 65 of water, so constructed as to permit the access of the water to the oil box and journals as herein described, thereby preventing heat and consequently the drying away of oil, and wear of the rubbing surfaces, and 70 the necessity of frequent oiling, using for the reservoir any material suitable, and any composition or metal for the bearings.

ELISHA REID.

Witnesses:

THOS. J. CAMPBELL,
JOHN J. MCKENDREE.