

(No Model.)

2 Sheets—Sheet 1.

H. JAMES.

BOLSTER PLATE FOR VEHICLES.

No. 281,076.

Patented July 10, 1883.

Fig. 1.

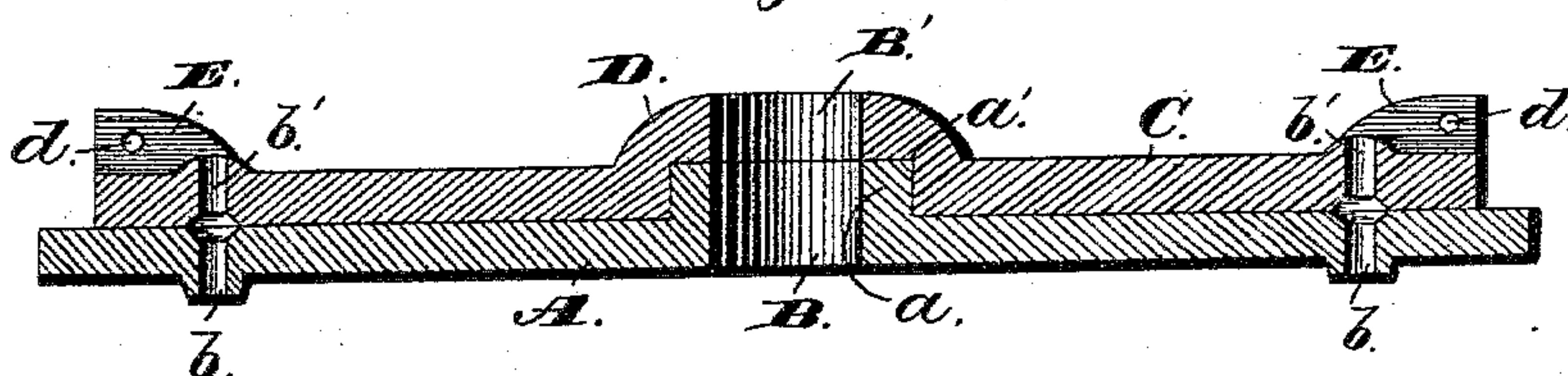


Fig. 2.

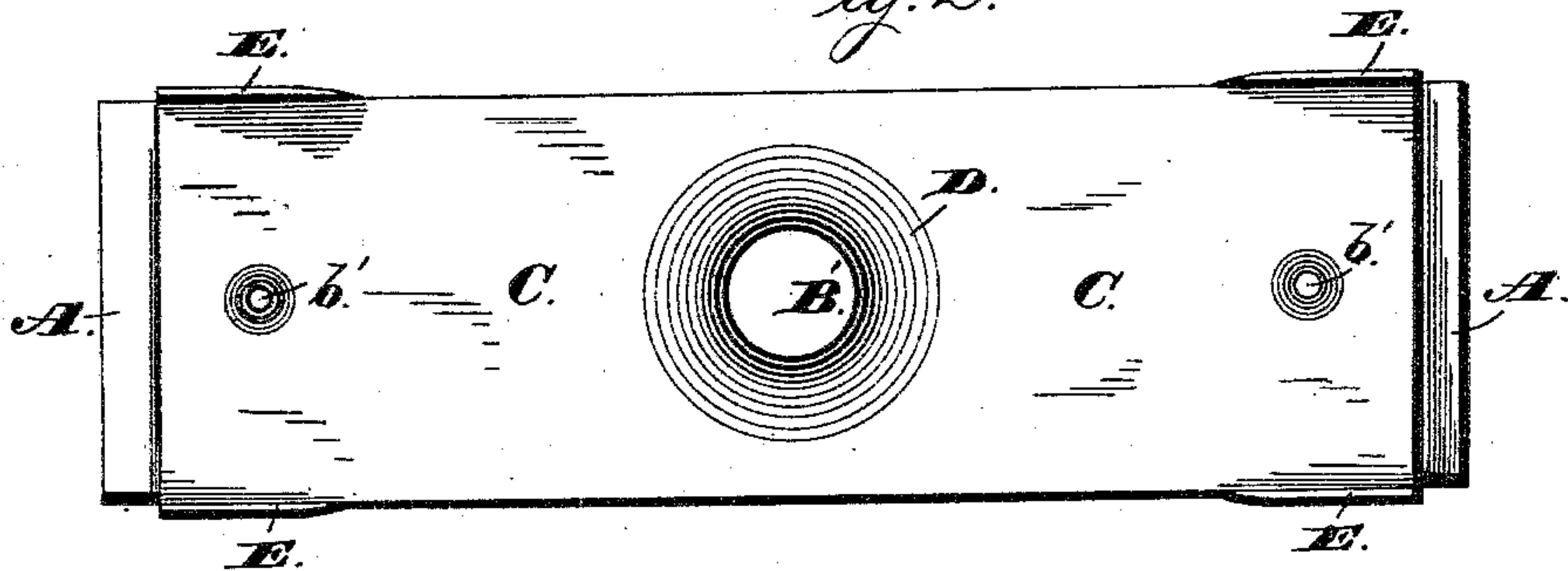
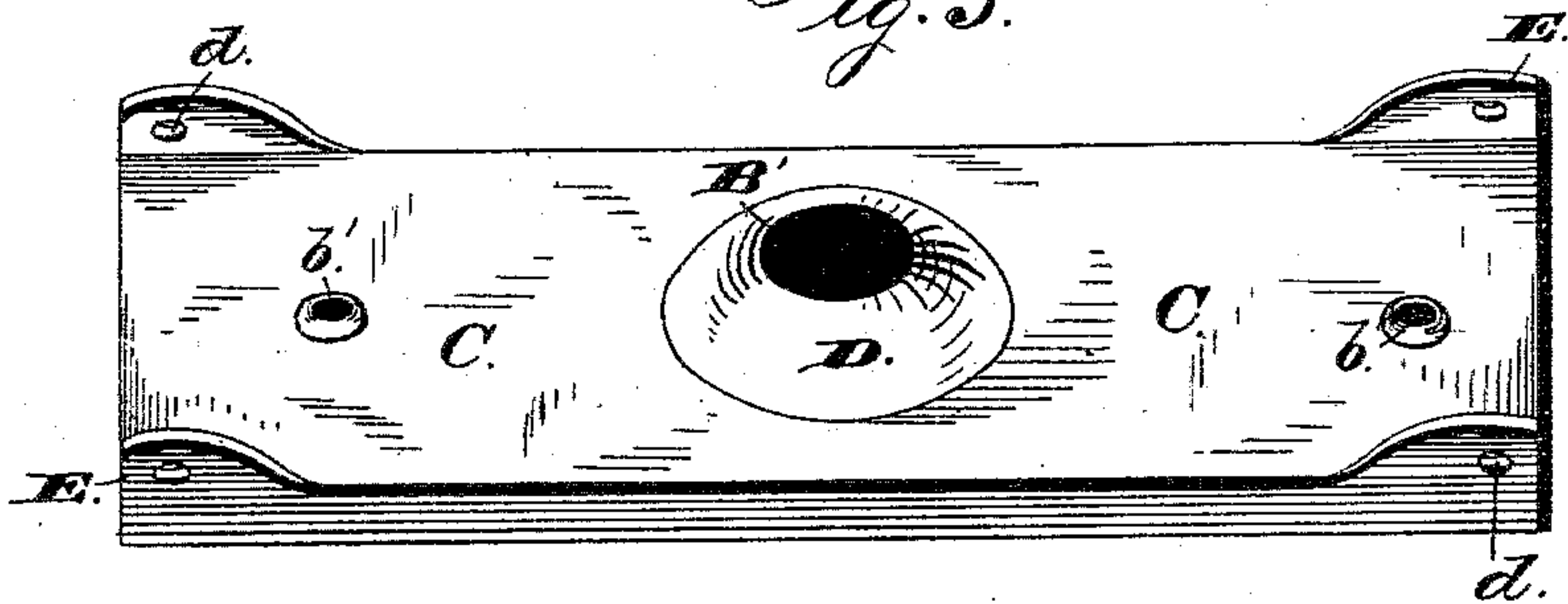


Fig. 3.



WITNESSES

Gas. E. Hutchinson.
Robert Everett.

INVENTOR

Henry James,
By James L. Norris.
Attorney

(No Model.)

2 Sheets—Sheet 2.

H. JAMES.

BOLSTER PLATE FOR VEHICLES.

No. 281,076.

Patented July 10, 1883.

Fig. 4.

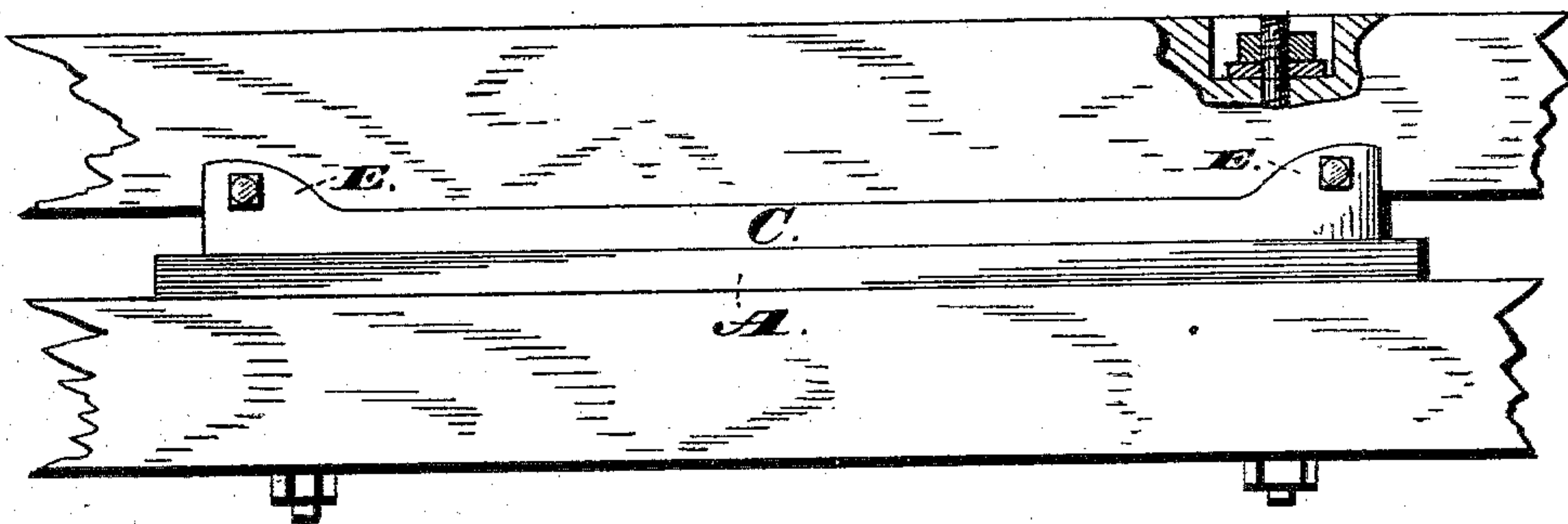
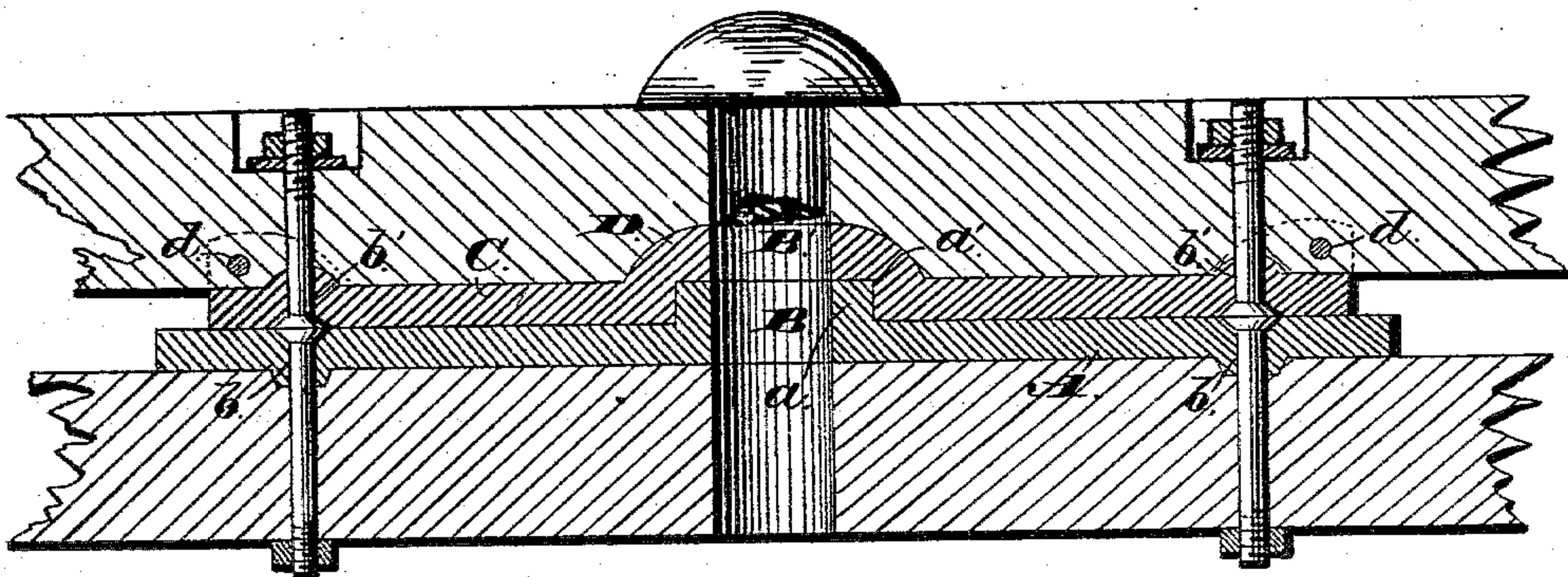


Fig. 5.



WITNESSES

Jas. E. Hutchinson.
Robert Everett.

INVENTOR

Henry James,
By James L. Norris.
Attorney

UNITED STATES PATENT OFFICE.

HENRY JAMES, OF MEMPHIS, TENNESSEE.

BOLSTER-PLATE FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 281,076, dated July 10, 1883.

Application filed April 10, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY JAMES, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented new and useful Improvements in Bolster-Plates for Vehicles, of which the following is a specification.

My invention relates to bolster-plates for carriages; and it consists in a novel construction of parts, which may be applied to one or both plates, whereby greater strength is obtained and a more durable structure provided:

Referring to the drawings, Figure 1 is a central longitudinal section taken through the sand-bolster plate and the rocking-bolster plate. Fig. 2 is a plan view of the parts shown in Fig. 1. Fig. 3 is a perspective view of the rocking-bolster plate. Fig. 4 represents a side elevation of a portion of a rocking bolster and sand-bolster of a vehicle, showing the bolster-plate and the sand-bolster plate connected with their respective portions. Fig. 5 is a longitudinal section of the same.

The upper or rocking bolster plate, C, I forge from a single piece of metal, and by suitable dies form a boss, D, rising from its upper surface. This boss is located centrally in said plate, and has a perforation, B', of equal diameter with the perforation B in the lower or sand bolster plate. In the body of the upper or rocking bolster plate, C, and concentric with the perforation B', I form an offset or equivalent, a', of such dimensions that it will sit upon the collar a and closely surround the same. While the parts are in this position the inner face of the perforation B in the lower or sand bolster plate will be flush with the opening B' in the boss D, formed in the upper or rocking bolster plate. The king-bolt, when placed therein, will therefore have a continuous bearing between the lower face of the plate A and the upper edge of the boss D. At the same time the collar a will receive support from and have bearing upon the annular enlargement a', formed in the body of the upper or rocking bolster plate, C. Both plates may be fastened in the usual manner by bolting or riveting through perforations b b', formed near the ends of each plate; but in addition to such fastenings I will form upon each corner of the upper or rocking bolster plate

lugs E, which project upward and partly over the sides of the bolster.

If desired, a similar construction may be adopted for the lower or sand bolster plate, and this method of fastening may be used either with or without the usual fastening devices already mentioned.

In attaching the plate C to the upper or rocking bolster the boss D is let into the wood, so that the lower face of said bolster shall lie upon the upper face of the plate. In this position the lugs E, at the four corners of the latter, will rest against and support the bolster, as already mentioned, and they may be strongly secured thereto by riveting through the perforation d in each lug, thereby greatly increasing the connection, strength, and durability of the parts.

It will be seen that when the king-bolt is placed in position the strain upon the parts will be not only distributed over a largely-increased bearing-surface, but will, moreover, be divided between the perforations B and B' and the bearing-surface which is afforded by the collar a, which is inclosed by the annular chamber a' in the body of the plate C.

It is also evident that as the vehicle is used the wear will be equally distributed between these bearing-surfaces, for as the collar a is gradually diminished by the constant frictional contact with the bolster-plate, an increased strain is thrown upon the perforations B and B', and vice versa. These surfaces will therefore wear equally, and neither will be destroyed until the whole structure is worn out.

Having thus described my invention, what I claim is—

The forged rectangular plate C, having ears embracing the sides of the rocking bolster, and a boss, D, fitting into said bolster, and provided with the offset a', in combination with the rectangular plate A, secured to the sand-bolster, and provided with collar a, fitting into offset a', the several parts fitting together and operating substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

Witnesses: HENRY JAMES.
THOS. WELLFORD,
WILLIAM H. HALE.