(No Model.) 2 Sheets—Sheet 1.

S. M. VAUCLAIN.

RIVETING MACHINE.

No. 543,324. Patented July 23, 1895.

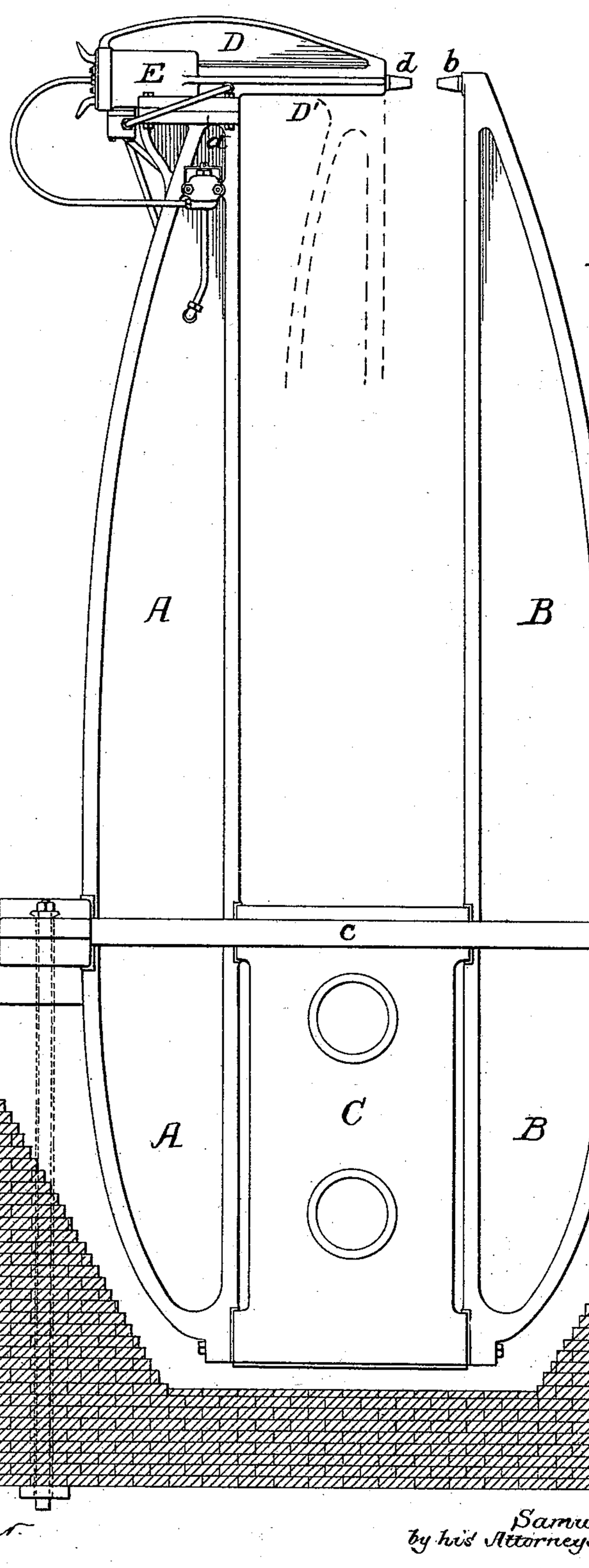

FIG. 1.

Witnesses:
R. Schleicher
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(No Model.) 2 Sheets—Sheet 2.

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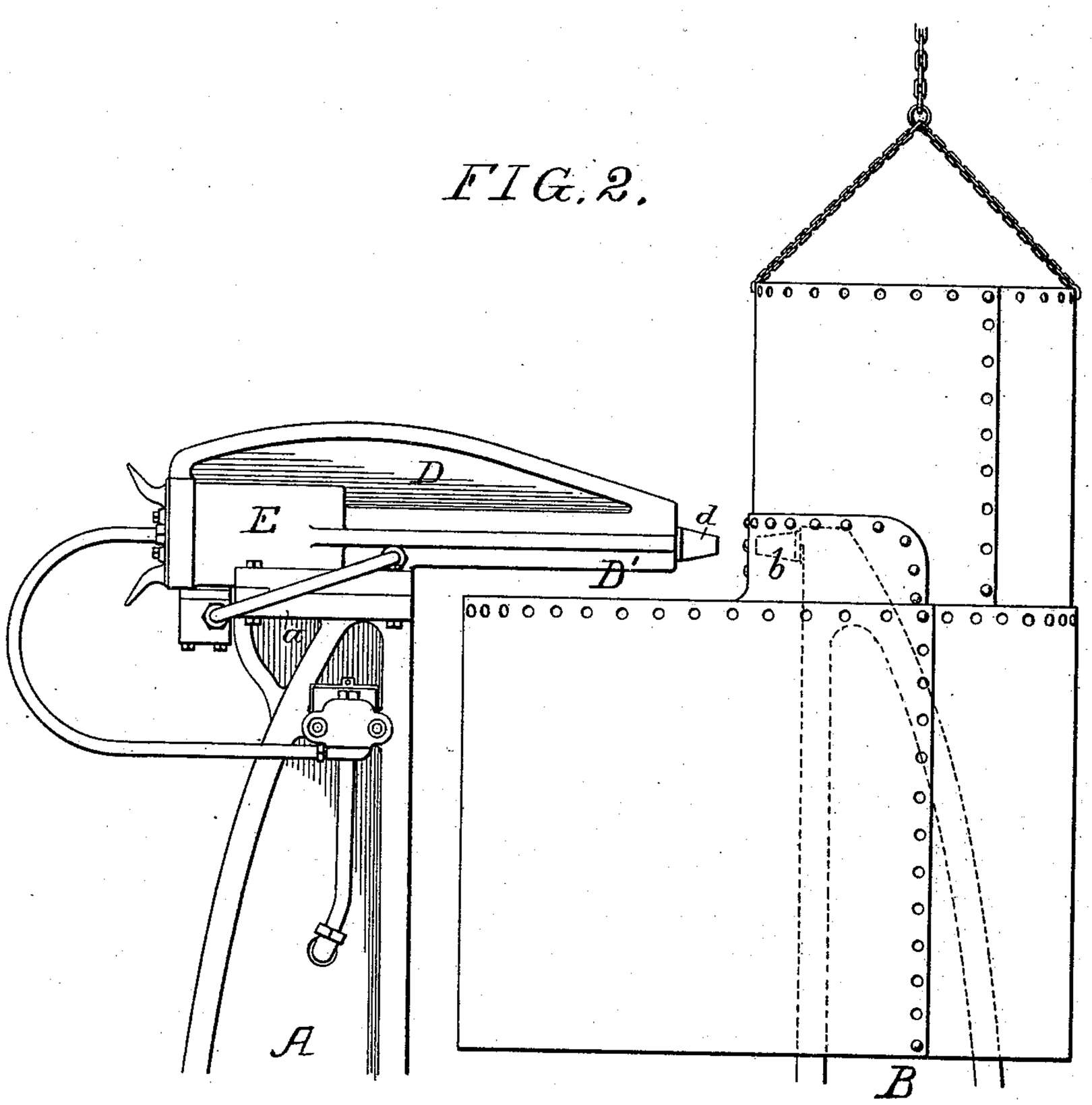
FIG. 2.



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UNITED STATES PATENT OFFICE.

SAMUEL M. VAUCLAIN, OF PHILADELPHIA, PENNSYLVANIA.

RIVETING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 543,324, dated July 23, 1895.

Application filed March 23, 1893. Serial No. 467,269. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL M. VAUCLAIN, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improved Riveting-Machine, of which the following is a specification.

The object of my invention is to so construct a riveting-machine that a locomotive-boiler can be riveted entirely by the machine without readjustment of the boiler.

In the accompanying drawings, Figure 1 is a side view of my improved riveting-machine. Fig. 2 is an enlarged view of the head portion, showing the fire-box section of the boiler in place.

I will describe my invention in connection with the locomotive-boiler, as it is especially adapted for this work; but it will be understood that the invention can be used in connection with other work as well.

In the ordinary construction of riveters of this class the two standards A and B are placed as close together as possible, as shown by dotted lines in Fig. 1, and the riveting-head is usually made flat on top and the boiler is hung in such a manner that the fire-box section will swing over the head B instead of under it, as shown in the drawings. This arrangement necessitates the readjustment of the boiler in many cases three or four times, and then a number of the rivets have to be headed by hand. The hanging of the boiler with the fire-box uppermost prevents the operator seeing the greater portion of the rivets, as they are adjusted and riveted without stooping, and consequently several of the rivets are headed at random.

By my invention the boiler can be suspended as shown in Fig. 2, and every rivet in the trunk portion as well as the fire-box portion can be seen by the operator and can be properly riveted without readjustment.

A is a standard secured to another standard B by tie-bolts *c*. A spacing-block C is placed between the two standards at the base so as to give sufficient space for the article to be riveted to swing in. The lower portions of the standards are mounted in a suitable foundation, as shown in Fig. 1.

Secured to the plate *a* of the standard A is the riveting-head D, the portion D′ of which projects over the space between the two standards to a point near the standard B, and this portion is preferably flat on the under side, so that the article to be riveted can be drawn up as near the riveting-plunger as possible to properly rivet the end rivets.

The plunger *d* in the present instance is operated by means of a hydraulic cylinder having suitable pipes and connections attached to the pressure mechanism; but it will be understood that mechanical riveting mechanism may be used without departing from my invention.

The anvil *b* is secured to the standard B in any suitable manner and in line with the plunger *d*.

As shown in Fig. 2, the looomotive-boiler is arranged in position so that the riveter can rivet the joint between the fire-box and the trunk of the boiler, the fire-box section being in the space under the overhanging portion D′ of the head and between the two standards A and B. By hanging the boiler in this manner the operator can see every rivet as it is headed without stooping. Consequently the rivets can be placed in position more quickly and the head of each rivet properly made.

I do not wish to limit myself to the construction of the lower portion of the riveter, as shown in the drawings, as this construction may be modified without departing from my invention.

I claim as my invention—

The combination of the standards A and B arranged a distance apart to allow the fire box of a locomotive boiler to swing between them, a spacing block C mounted between the standards, a bolt securing the standards together, an anvil on the standard B, a riveting head D on the standard A and overhanging the space between the standards A and B to a point near the anvil, riveting mechanism in said head, the overhanging portion of the head being flat on the under side, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL M. VAUCLAIN.

Witnesses:
JAS. H. M. HAYES,
JAMES G. KEYS.