(No Model.) 3 Sheets—Sheet 1.

S. M. VAUCLAIN.

APPARATUS FOR PUTTING TOGETHER AND DRILLING LOCOMOTIVE AND CAR TRUCKS.

No. 355,901. Patented Jan. 11, 1887.

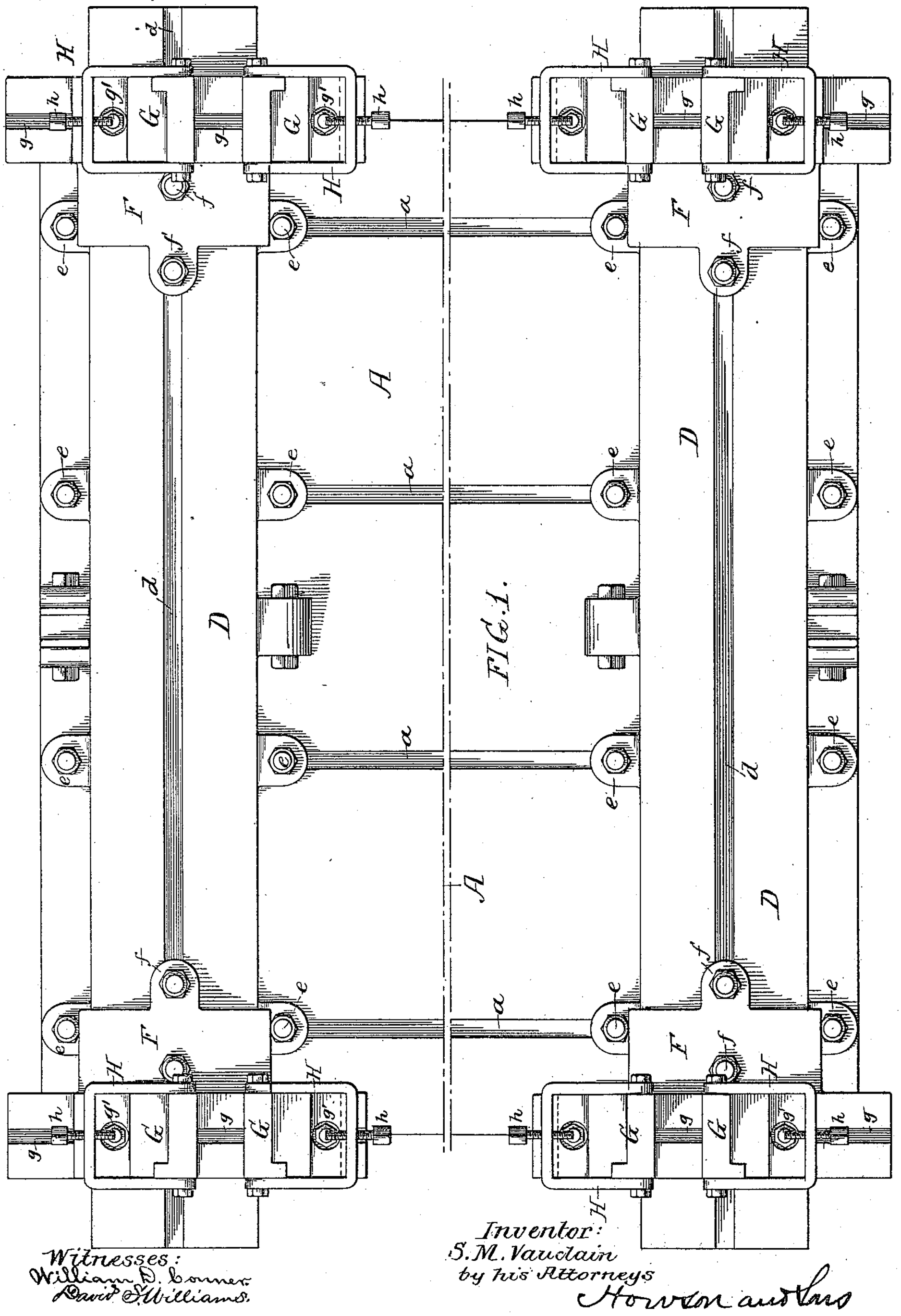

FIG. 1.

Witnesses:
William D. Conner.
David F. Williams.

Inventor:
S. M. Vauclain
by his Attorneys
Howson and Sons

(No Model.) 3 Sheets—Sheet 2.

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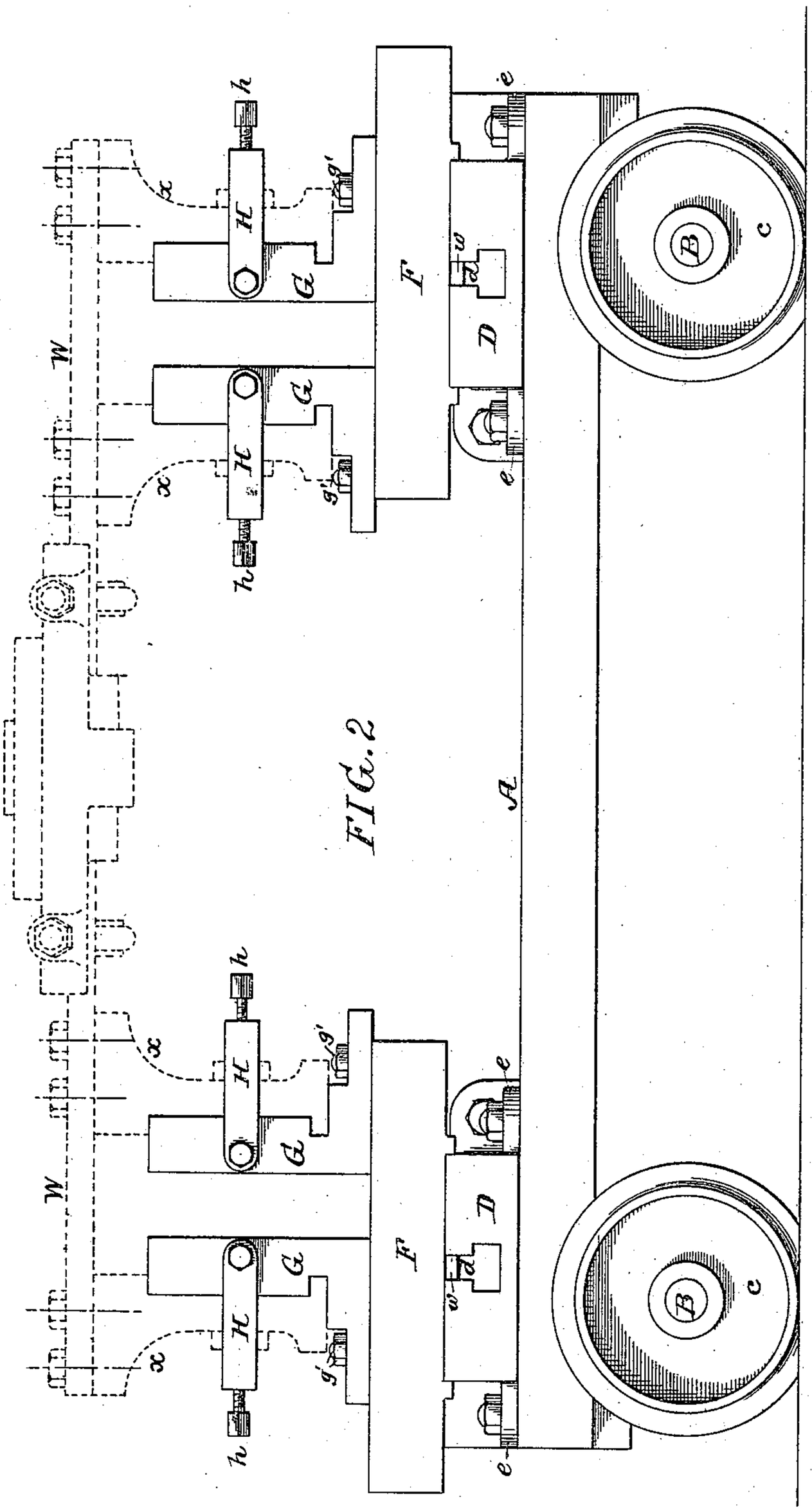

FIG. 2

Witnesses:
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David S. Williams.

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(No Model.) 3 Sheets—Sheet 3.

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FIG. 3.

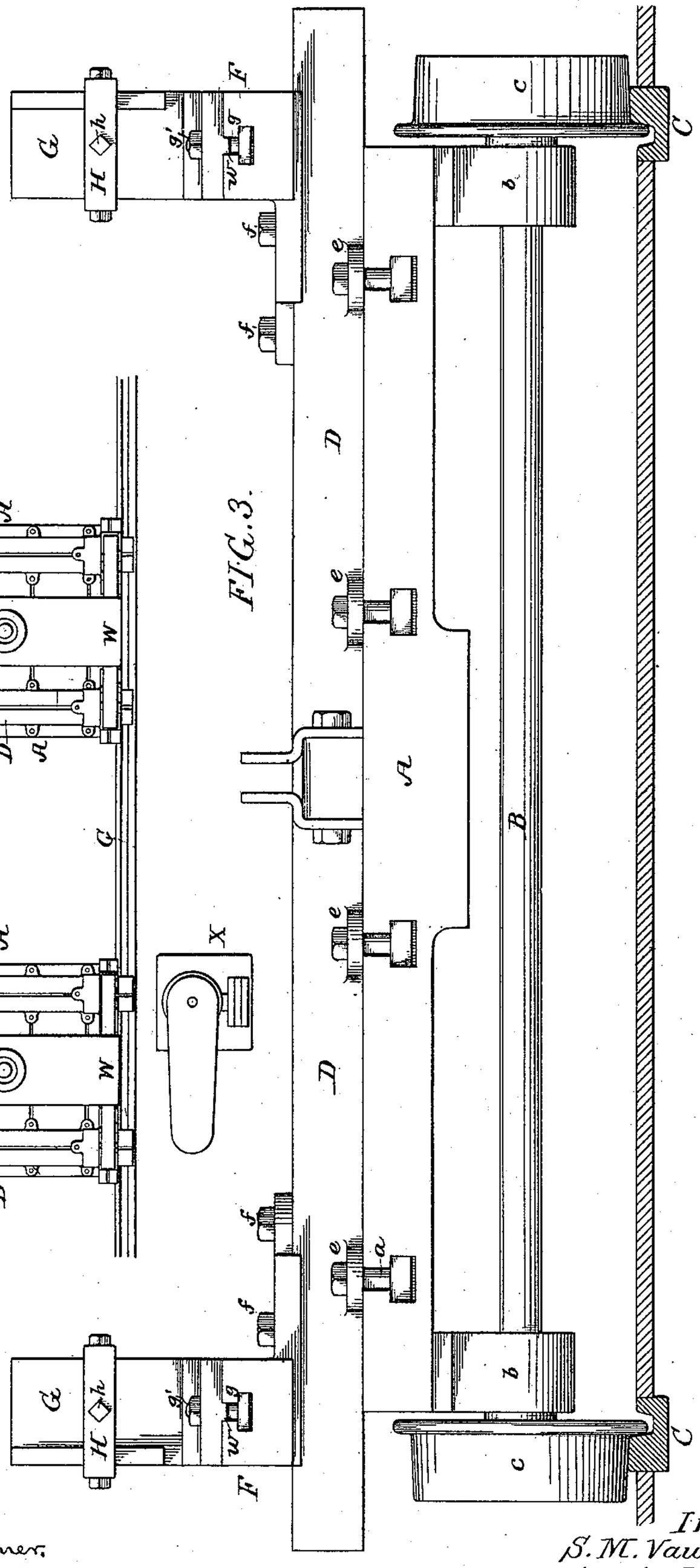

FIG. 4.

Witnesses:
William D. Bonner.
David F. Williams.

Inventor:
S. M. Vauclain
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UNITED STATES PATENT OFFICE.

SAMUEL M. VAUCLAIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO GEORGE BURNHAM, CHARLES T. PARRY, EDWARD H. WILLIAMS, WILLIAM P. HENSZEY, JOHN H. CONVERSE, WILLIAM C. STROUD, WILLIAM H. MORROW, AND WILLIAM L. AUSTIN, ALL OF SAME PLACE.

APPARATUS FOR PUTTING TOGETHER AND DRILLING LOCOMOTIVE AND CAR TRUCKS.

SPECIFICATION forming part of Letters Patent No. 355,901, dated January 11, 1887.

Application filed October 25, 1886. Serial No. 217,199. (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 certain Improvements in Apparatus for Fitting up Trucks for Locomotives and Cars, of which the following is a specification.

The main object of my invention is to insure the accurate fitting and proper alignment of the axle-box pedestals and the frames of trucks for locomotives, cars, &c., a further object being to facilitate the proper formation and location of the holes for receiving the bolts whereby the pedestals are secured to the frame. These objects I attain by rigidly securing the pedestals in their proper positions in relation to each other before applying the frame thereto, and then forming the bolt-holes in said frame and pedestals.

In the accompanying drawings, Figure 1 is a plan view of the device constructed in accordance with my invention for retaining the pedestals in their proper positions. Fig. 2 is a side view of the same, showing the frame and axle-box pedestals of a locomotive-tender truck in dotted lines thereon. Fig. 3 is an end view of the device; and Fig. 4 is a diagram on a reduced scale, showing in plan view a boring plant of which two of my improved retaining devices form part.

A tedious and expensive part of the present method of making trucks for locomotives, cars, &c., is the determination of the proper points on the frame and pedestals at which to bore the holes for receiving the bolts by which said pedestals are secured to the frame, great accuracy in this respect being required in order that the pedestals shall bear the proper relation to each other and to the frame, and the work hence demanding the services of skilled mechanics. With the view of simplifying and cheapening this operation I employ a bed-plate having standards to which the various pedestals of the truck can be rigidly secured in proper relation to each other, the frame being then properly adjusted to the pedestals and secured in position, so that the bolt-holes can be formed in both frame and pedestals, and said holes can be tapped or reamed and the parts secured together while all of said parts are rigidly clamped in position on the bed-plate.

In the accompanying drawings, A represents the bed-plate, having on the under side bearings *b* for the axles B, which are provided at their outer ends with flanged wheels *c c*, adapted to run on the rails C C of a track laid on the floor of the shop, and extending between a pair of vertical drill-presses, X, as shown in the diagram Fig. 4.

The bed-plate A has a series of undercut grooves, *a*, which receive the heads and part of the shanks of bolts *e*, the latter serving to confine to the bed-plate A the transverse bars D, two of which are shown in the present instance.

The bars D have undercut slots *d*, which receive the heads and shanks of bolts *f*, which confine the sills F, and the latter are also provided with undercut slots *g*, to which are adapted the heads and shanks of bolts *g'*, which confine a series of upright standards, G, to the sills. It will thus be seen that owing to the slots the bars D D can be adjusted on the bed-plate A, the sills F can be adjusted on the bars D, and the upright standards G can be adjusted on the sills, the movements being all in true longitudinal or transverse lines, so that, supposing that each of the standards G is to carry one of the pedestals of the truck, the parts can be readily adjusted to suit any desired width of truck, any desired width of box, and any desired distance between centers of axles, and when once the parts are adjusted pedestals confined to the standards must necessarily bear the proper relation to each other.

In order to further insure accuracy in the movement of the bars D, sills F, and standards G, they are provided with tongues *w*, adapted to the slots which receive the confining-bolts.

Any desired means may be adopted for adjusting the parts, this forming no essential feature of my invention.

Pivoted yokes H, provided with set-screws *h*, serve to securely confine the pedestals to the standards G.

In fitting up a truck the bars, sills, and standards are adjusted to suit the requirements of the truck, and the pedestals (shown by dotted lines in Fig. 2) are firmly clamped to the standards by means of the yokes H. The top frame, W, is then placed in position on the pedestals and properly clamped to the bed-plate, which is then moved under the drill-presses X X, the necessary holes in the frame and pedestals being then drilled, reamed, and tapped, if desired, and any other holes which may have to be formed in the frame or assembled parts being also made before the truck is moved away from the drill-presses, so as to avoid the trouble and expense of subsequent handling. While these operations are being performed another truck is being set up on another table, and when the first truck is moved from under the drill-presses, in order to permit the securing of the pedestals to the frame by suitable bolts, the second truck can be passed under the presses and the operation repeated.

For fitting up a two-wheeled truck but one of the bars D is required, while for a six-wheeled truck three of said bars may be used.

I claim as my invention—

1. The within-described apparatus for facilitating the fitting up of trucks for locomotives, cars, &c., the same consisting of a bed-plate having standards serving as gages for the various axle-box pedestals of the truck, in combination with means for rigidly securing the pedestals to said standards, all substantially as specified.

2. The combination of the bed-plate, the transverse bars adjustable thereon, sills adjustable on said bars, standards adjustable on said sills, and means for confining the pedestals to said standards, all substantially as specified.

3. The combination of a pair of drill-presses, a track extending between the same, and a bed-plate having wheels adapted to said track, said bed-plate being provided with projecting standards serving as gages for the various axle-box pedestals of a truck, all substantially as specified.

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

SAMUEL M. VAUCLAIN.

Witnesses:
HOWARD Y. RIEGNER,
WILLIAM VOLLMER.