No. 688,904. Patented Dec. 17, 1901.

C. G. VACHON.

METALLIC SLEEPER.

(Application filed July 25, 1899.)

(No Model.) 3 Sheets—Sheet 1.

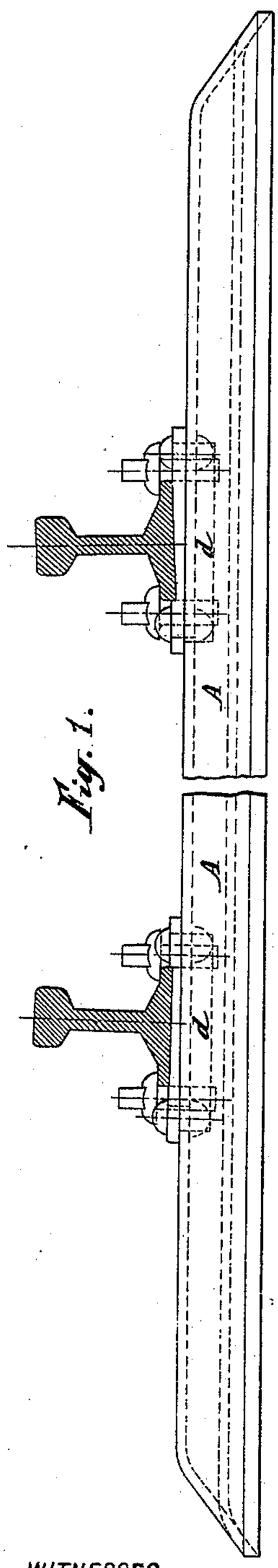


Fig. 1.

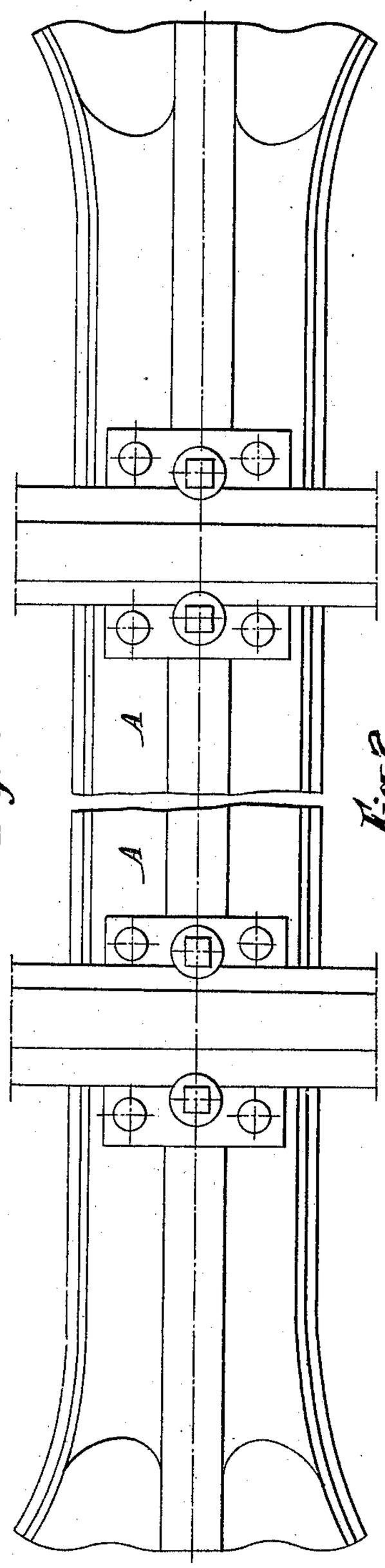


Fig. 3.

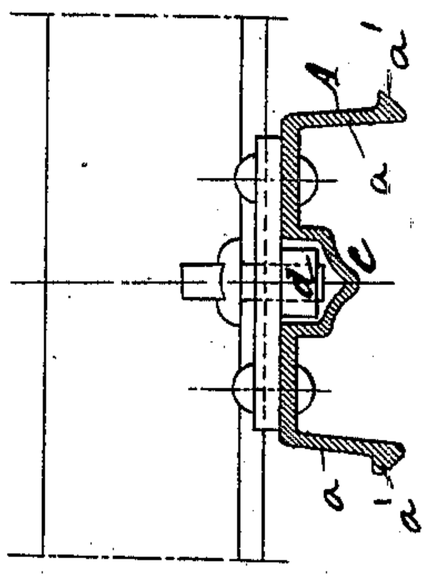


Fig. 2.

WITNESSES:
Ella L. Giles
Attorneys

INVENTORS.
Camille Gabriel Vachon
BY Richards & R
ATTORNEYS

No. 688,904. Patented Dec. 17, 1901.

C. G. VACHON.

METALLIC SLEEPER.

(Application filed July 25, 1899.)

(No Model.) 3 Sheets—Sheet 2.

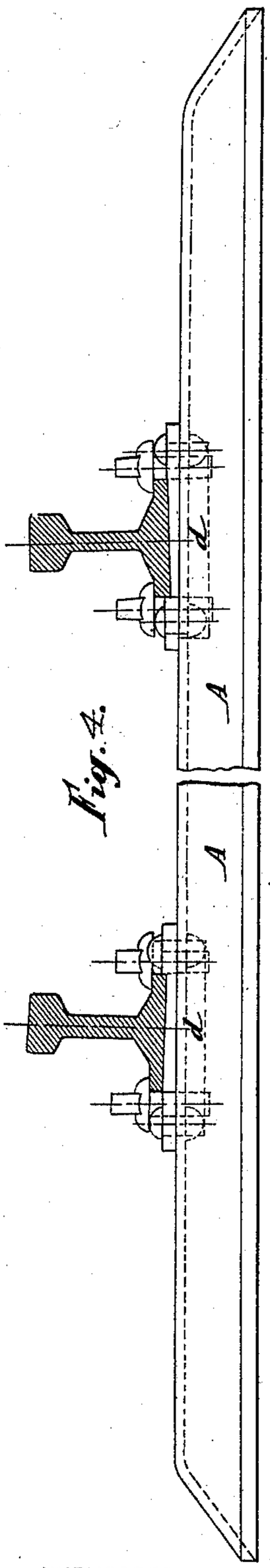


Fig. 4.

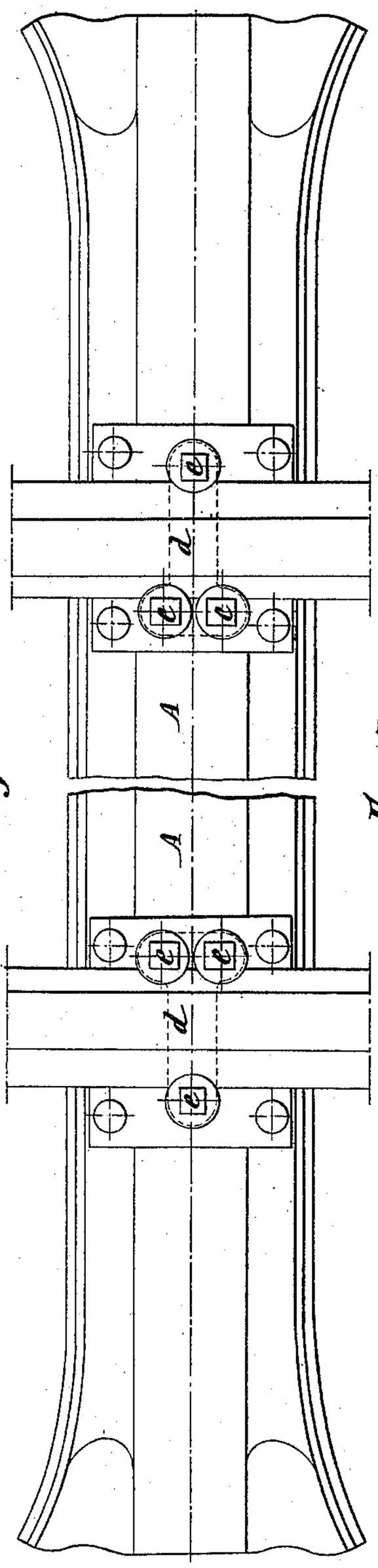


Fig. 6.

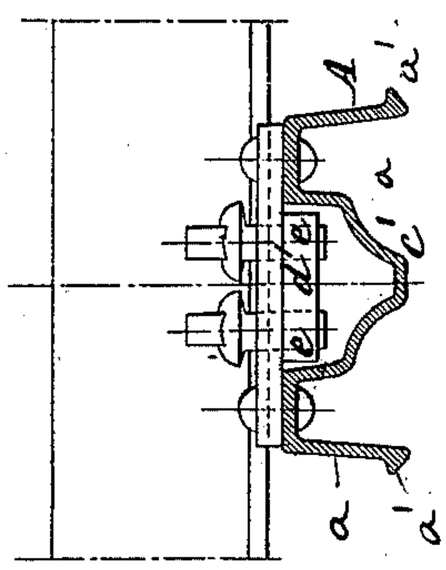


Fig. 5.

WITNESSES:

Ella L. Giles

Attorney

INVENTORS.

Camille Gabriel Vachon

BY Richardson R

ATTORNEYS.

No. 688,904. Patented Dec. 17, 1901.

C. G. VACHON.

METALLIC SLEEPER.

(Application filed July 25, 1899.)

(No Model.) 3 Sheets—Sheet 3.

Fig. 7.

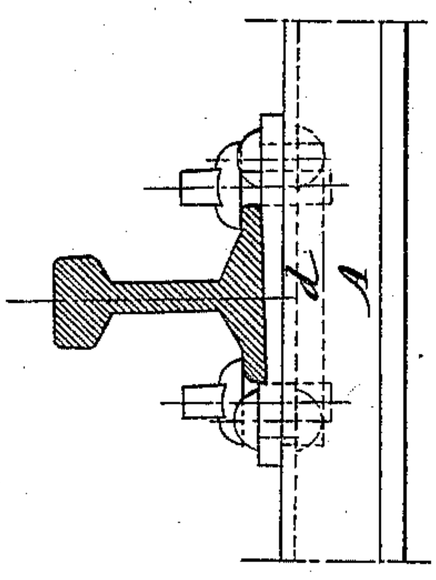


Fig. 9.

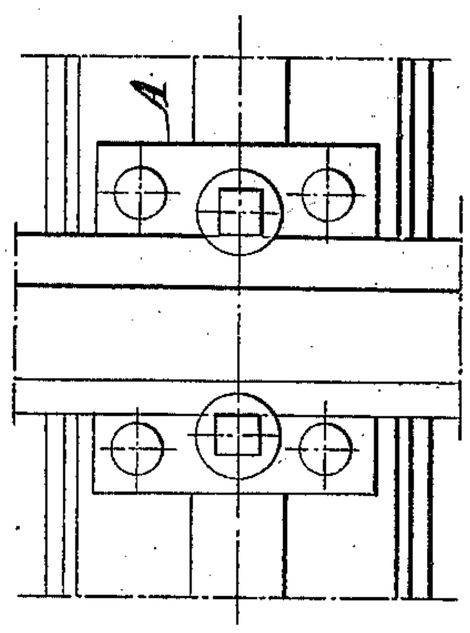
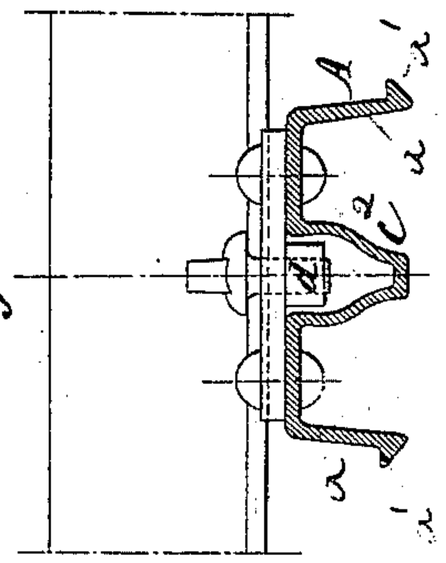


Fig. 8.



WITNESSES:
Ella L. Giles
Otterman

INVENTORS
Camille Gabriel Vachon.
BY Richards & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

CAMILLE GABRIEL VACHON, OF PARIS, FRANCE.

METALLIC SLEEPER.

SPECIFICATION forming part of Letters Patent No. 688,904, dated December 17, 1901.

Application filed July 25, 1899. Serial No. 725,287. (No model.)

To all whom it may concern:

Be it known that I, CAMILLE GABRIEL VACHON, a citizen of the Republic of France, residing at 85 Rue d'Amsterdam, Paris, France, have invented certain new and useful Metallic Sleepers, of which the following is a specification.

This invention relates to metallic sleepers and rail-fastenings for railways, as I shall describe, referring to the accompanying drawings.

Figure 1 is a side elevation of the sleeper; Fig. 2, a cross-section, and Fig. 3 a plan view. Fig. 4 is a side view of a modified form, showing a different fastening method, Fig. 5 being a sectional view thereof, and Fig. 6 a plan view. Fig. 7 is a side view of another form, Fig. 8 being a sectional view, and Fig. 9 a plan of the same.

Referring to Figs. 1, 2, and 3, A indicates the sleeper, which is rolled in iron or steel to the shape shown. It is provided in the center with a substantially V-shaped depression, and its flat upper surface terminates on either side in a downwardly-turned side edge *a*, these side edges, together with the central V-shaped depression, forming comparatively sharp ballast-engaging ribs or flanges, the bottom of the sleeper being open, as shown. The side edges are preferably provided in addition with ribs or beads *a'*. A plate *d* is located in the V-shaped depression, which is engaged by the bolts for securing the rails to the sleeper, as shown.

In Figs. 4, 5, and 6 I have shown a form in which the V-shaped depression is wider to accommodate a modified form of fastening means, including a broad plate *d'* and three bolts E, as shown.

In Figs. 7, 8, and 9 I have shown the center depression *c* as narrower, like Figs. 1, 2, and 3, but extending down to the level of the edges *a*.

Having thus particularly described the nature of this invention and the best means I know of carrying the same into practical effect, I claim—

1. A rolled metallic sleeper of inverted-channel shape, having an open bottom, said sleeper having a substantially V-shaped depression in its upper face with flat surfaces on either side thereof terminating in downwardly-turned side edges, said side edges, together with the central depression, forming comparatively sharp ballast-engaging ribs or flanges, substantially as described.

2. A rolled metallic sleeper of inverted-channel shape having an open bottom, said sleeper having a substantially V-shaped depression in its upper face with flat surfaces on either side thereof terminating in downwardly-turned side edges, said side edges together with the central depression forming comparatively sharp ballast-engaging ribs or flanges and said side edges having beads, near their edges, substantially as described.

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

CAMILLE GABRIEL VACHON.

Witnesses:
EDWARD P. MACLEAN,
PAUL F. PÂQUET.