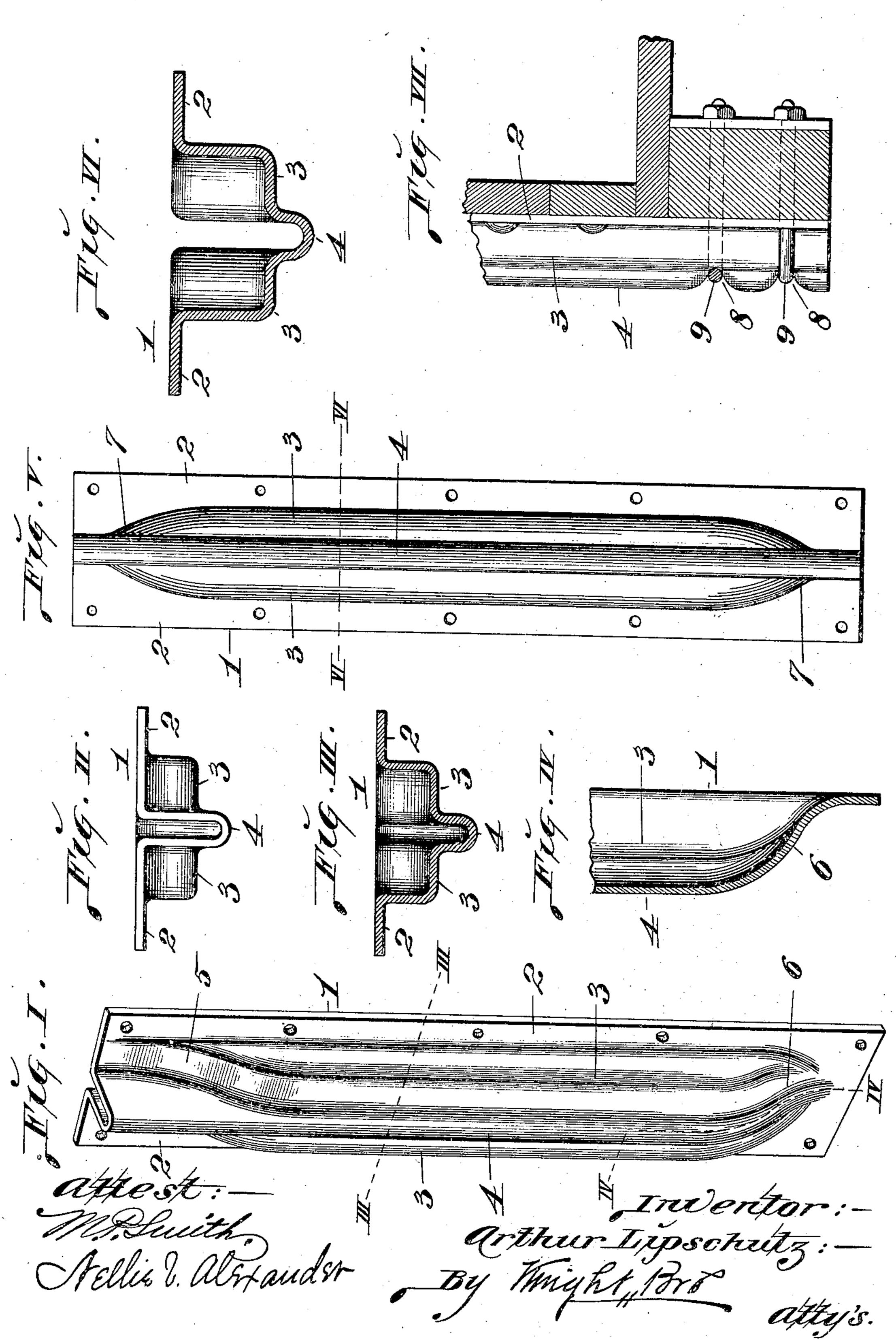
## A. LIPSCHUTZ. CAR BODY STAKE. APPLICATION FILED MAY 13, 1904.

NO MODEL,



## United States Patent Office.

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## CAR-BODY STAKE.

SPECIFICATION forming part of Letters Patent No. 766,048, dated July 26, 1904.

Application filed May 13, 1904. Serial No. 207,740. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR LIPSCHUTZ, a citizen of the United States, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Car-Body Stakes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

The object of my invention is to produce a metal stake for car-bodies which will combine minimum weight and quantity of material with

maximum rigidity and strength.

To these ends my invention relates to a stake which is of trough shape in transverse section and on the surface of which is a rib of less width than the width of the trough, the result being that a very rigid stake is produced by the use of metal of minimum thickness.

Figure I is a perspective view of my improved stake. Fig. II is an end view. Fig. III is a transverse section taken on line III III, Fig. I. Fig. IV is a detail longitudinal view taken on line IV IV, Fig. I. Fig. V is a face view or elevation of my improved stake in a slightly-modified form. Fig. VI is a transverse section taken on line VI VI, Fig. V. Fig. VII is a detail longitudinal section of my improved stake in the form I prefer to make it when used for wooden car constructions.

Referring to the drawings, 1 represents my improved stake for use on metallic car-body constructions. This stake is preferably made of pressed steel, and it consists of lateral 35 flanges 2, perforated to receive attaching-rivets, a trough-shaped portion 3, and a central rib 4, projecting from the outer portion or face of the trough. The sides of the trough may either merge into the lateral flanges 2, as 40 shown at 5, Fig. I, or they may merge both into the lateral flanges and into the rib, as shown at 6. Fig. I, or they may merge into the sides of the rib, as shown at 7, Fig. V. For the top of the stake I prefer to merge them into the 45 lateral flanges and for the bottom of the stake into both the flanges and the rib, as indicated in Fig. I. By merging the ends of the trough

into the lateral flanges or into the rib the stake has the advantage of a wide strengthening-trough throughout the main portion of 50 its length while the ends of the stake have comparatively small cavities or openings to receive moisture and foreign matter. By thus making a stake having a trough shape middle portion, from the central part of which 55 projects a longitudinal rib, great strength is obtained, while the thickness of the metal (and the consequent weight of the stake) may be quite thin compared with the thickness that would be required in order to secure the same 60 strength in the absence of the rib on the trough. Not only is greater strength obtained by the shape of my improved stake, but also greater rigidity, (owing to the angles formed by the trough and rib,) and the stake 65 may be subjected to severe blows or impacts without becoming dented or distorted.

In Fig. VII, I have shown the stake in the form suitable for use in wooden constructions of car-bodies. This differs from the other 70 form only in that the rib 4 is interrupted at 8 to receive retaining straps or stirrups 9, that connect the lower ends of the stake to the

car-body sills.

I claim as my invention—

1. A car-body stake of trough shape in transverse section and having a central reinforcing-rib, substantially as set forth.

2. A car-body stake made of sheet-steel and which is of trough shape in transverse section 80 with a central reinforcing-rib, substantially as set forth.

3. A car-body stake made of sheet-steel and which is of trough shape in transverse section with a rib running substantially the full length 85 of the stake, substantially as set forth.

4. A car-body stake of trough shape in transverse section and having lateral flanges into which the sides of the trough merge near the ends of the stake said merging being in 90 the direction of the length of the stake, substantially as set forth.

5. A sheet-metal car-body stake formed with perforated attaching-flanges, a trough between

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said flanges, and a rib projecting from the central portion of the trough, substantially as set forth.

6. A sheet-metal car-body stake consisting of attaching-flanges, a trough-shaped portion between said flanges, and a rib projecting from the central portion of the trough; the

sides of said trough merging into said flanges and rib near the ends of the stake, substantially as set forth.

ARTHUR LIPSCHUTZ.

In presence of—
BLANCHE HOGAN,
NELLIE V. ALEXANDER.