

(No Model.)

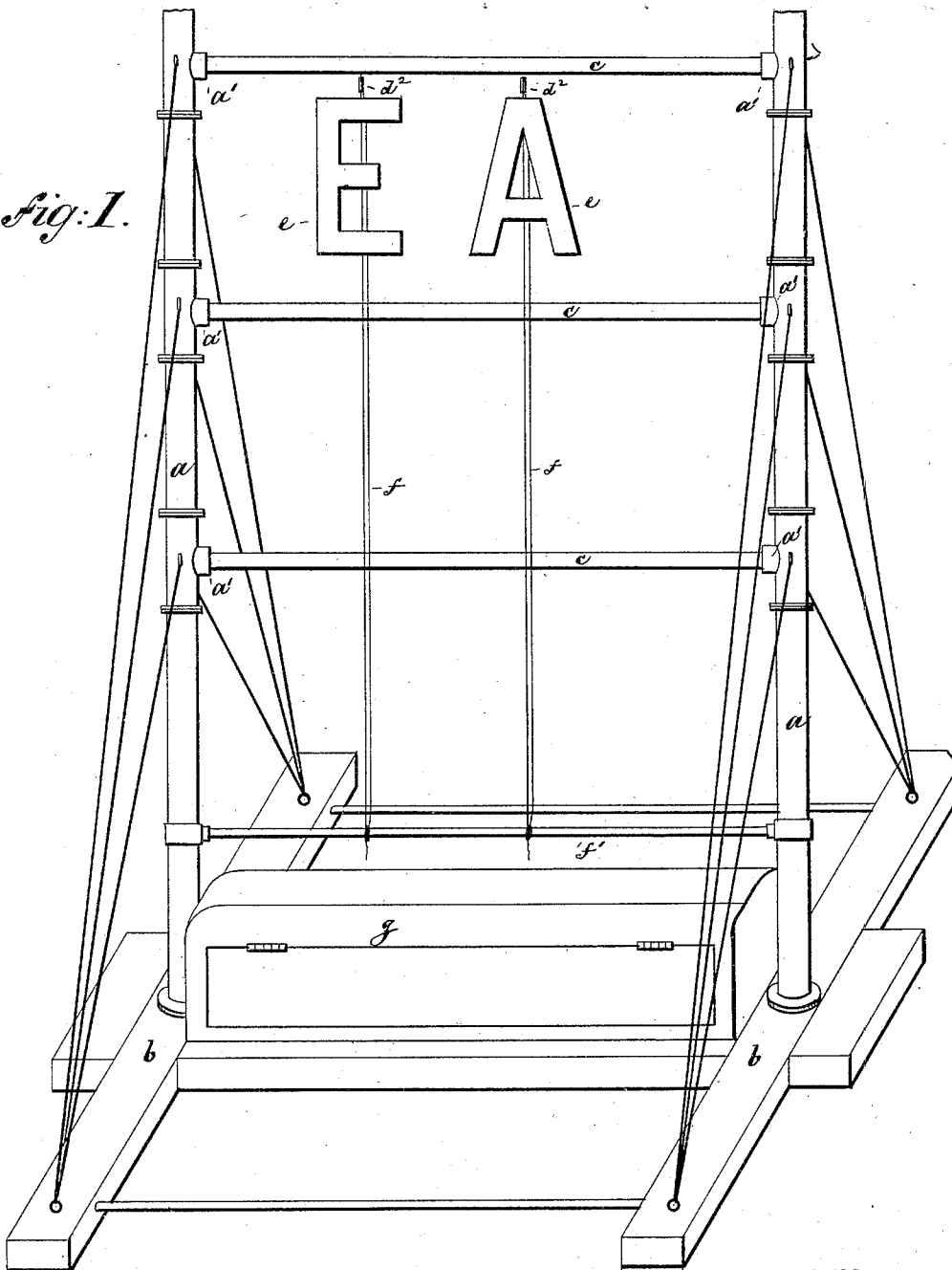
3 Sheets—Sheet 1.

J. LINDNER.
SIGN.

No. 473,883.

Patented Apr. 26, 1892.

Fig. 1.



WITNESSES:

A. Schehl.
Wm. Schulz

INVENTOR

BY *J. Lindner*
Roeder & Bissan
ATTORNEYS.

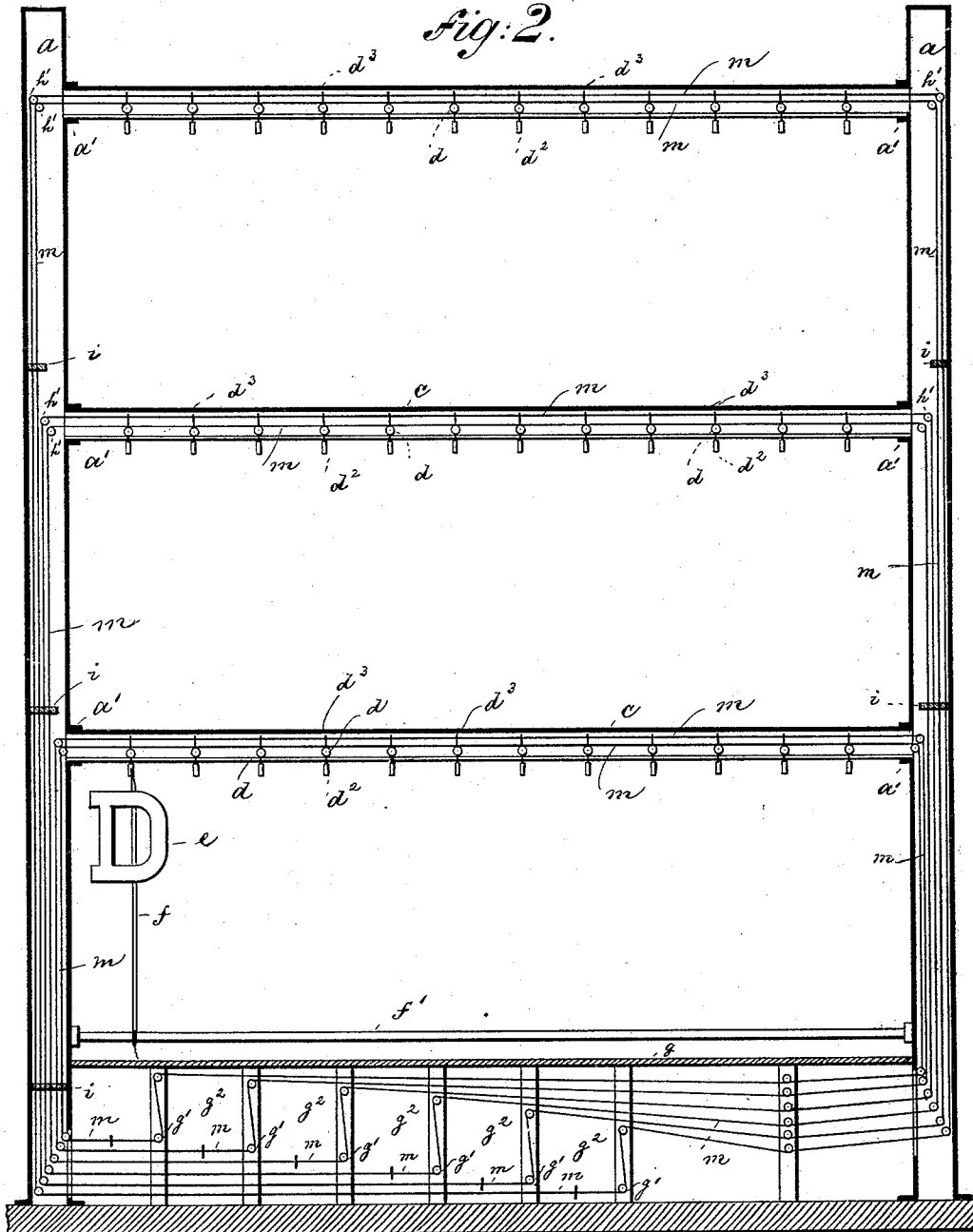
(No Model.)

3 Sheets—Sheet 2.

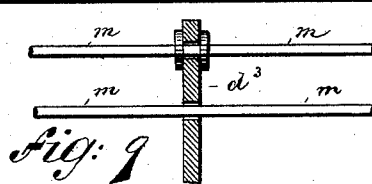
J. LINDNER.
SIGN.

No. 473,883.

Patented Apr. 26, 1892.



WITNESSES:
A. Schehl.
Wm. Schulz.



INVENTOR

BY *J. Lindner*
Roeder & Priesew
ATTORNEYS.

(No Model.)

3 Sheets—Sheet 3.

J. LINDNER.
SIGN.

No. 473,883.

Patented Apr. 26, 1892.

Fig. 3.

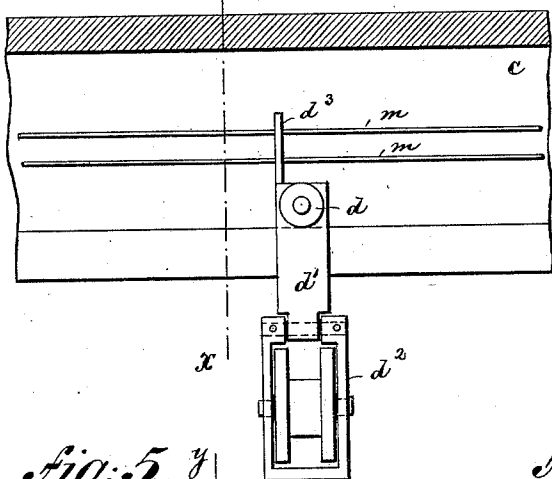


Fig. 4.

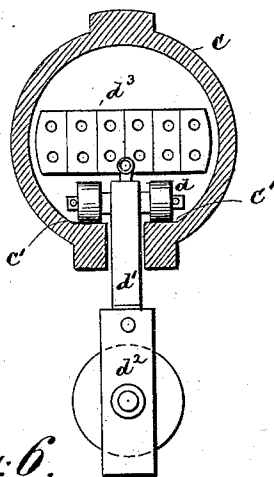


Fig. 5.

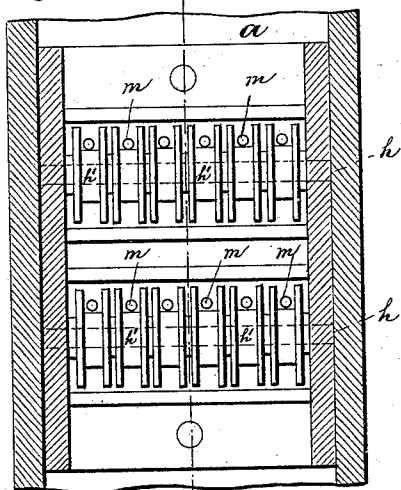


Fig. 6.

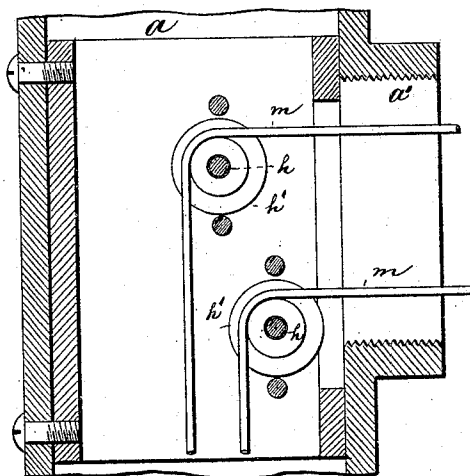
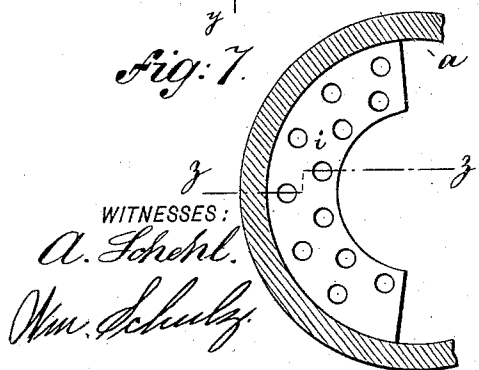


Fig. 7.

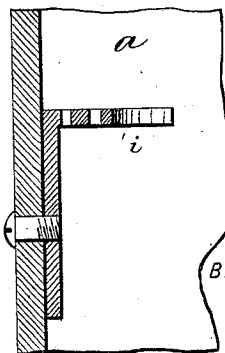


WITNESSES:

A. Schehl.

Wm. Schulz.

Fig. 8.



INVENTOR

J. Lindner
BY
Roeder & Briesen
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOSEF LINDNER, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO MORITZ GRUBER, OF SAME PLACE.

SIGN.

SPECIFICATION forming part of Letters Patent No. 473,883, dated April 26, 1892.

Application filed December 30, 1891. Serial No. 416,544. (No model.)

To all whom it may concern:

Be it known that I, JOSEF LINDNER, of New York city, New York, have invented an Improved Sign, of which the following is a specification.

This invention relates to an improved sign adapted to be mounted upon a roof or similar place and in which a series of laterally-adjustable and vertically-movable letters are suspended from a frame of peculiar construction.

The invention consists in the various features of improvement more fully pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved sign; Fig. 2, a vertical longitudinal section thereof; Fig. 3, a vertical longitudinal section through part of one of the horizontal rails *c*; Fig. 4, a cross-section on line *x x*, Fig. 3; Fig. 5, a vertical section through part of one of the posts *a*; Fig. 6, a section on line *y y*, Fig. 5; Fig. 7, a cross-section through one of the posts *a*; and Fig. 8, a section on line *z z*, Fig. 7. Fig. 9 is a detail vertical transverse section through plates *d*³. Figs. 1 and 2 are drawn on a smaller scale than the remaining figures.

The letters *a a* represent a pair of tubular posts or uprights projecting from a base *b* and connected by sockets *a'* with a number of horizontal rails *c*. The rails *c* are made in the form of tubes that are provided with a slit at the bottom extending from end to end. To each side of the slit the tube *c* is provided on its inner face with a horizontal flange or bearing-surface *c'*, Fig. 4. Upon these flanges travel the trucks *d* of as many letters as are to be suspended from the rail. To the axle of the truck there is secured by arm *d'* a pulley *d*², to which in turn the letter "e" of the sign is adapted to be attached. This letter is thus laterally adjustable upon the rail, and any word can therefore be symmetrically arranged whether of greater or less length. The letter "e" is suspended from pulley *d*² by means of a rope *f*, both ends of which are attached to the letter. The rope is wound around a bar *f'* near the bottom of the apparatus to allow the letter to be hoisted similar to a flag.

In order to impart the lateral motion to the trucks *d*, each truck is provided with an end-

less wire *m*, passing through the tubes *c*, uprights *a*, and a box *g*, connecting the uprights at the bottom. To keep the wires properly separated, each truck is provided with a perforated plate *d*³, through which the several wires pass singly, excepting the wire that moves the truck, which is of course attached to its plate. Thus in Fig. 9 the upper wire *m* is shown to be secured to the plate *d*³ by a pair of collars, while the lower wire passes freely through such plate.

The drawings show the arrangement used if twelve letters are to be suspended from every rail *c*. In that case the plate *d*³ has six upper perforations and six lower perforations, Fig. 4, and each tube *c* contains six upper wires and six lower wires. Every one of these wires moves one of the trucks *d* and passes loosely through the plates *d*³ of all the other trucks. At the connections of tubes *c* and box *g* with uprights *a* there are hung in such uprights upon shafts *h* a number of pulleys *h'*, over which the wires pass in turning the corners. Within the uprights *a* the wires are kept properly separated by means of perforated shelves *i*, Figs. 7 and 8.

In order to permit proper access to the several wires within the box *g*, the wires are arranged in a peculiar step-shaped method, so that each wire occupies a top position during some portion of its length. This is accomplished by a set of rollers or pulleys *g'*, arranged step-shaped within box *g*, so as to divide the latter into a series of compartments. Within each compartment one set of wires will be on top, and thus any one wire can be readily reached.

The operation of the sign will be readily understood. The letters are suspended from the pulleys by wires *f*, and the pulleys are shifted into the desired position by means of the wires *m*.

What I claim is—

1. The combination of uprights *a*, tubular slotted cross-rails, trucks within the cross-rails, sign-letters suspended from said trucks, and wires *m*, connected to and operating the trucks, substantially as specified.

2. The combination of uprights *a*, slotted cross-rails *c*, trucks within such cross-rails, perforated plates *d*³, and pulleys secured to

the trucks, and wires *m*, connected to the perforated plates, substantially as specified.

3. The combination of uprights *a*, slotted cross-rails, trucks within the same, wires *m*,
5 connected to the trucks and passing through the uprights and cross-rails, and a series of pulleys *g'*, arranged in steps and around which the wires pass, substantially as specified.

4. The combination of uprights *a*, slotted

cross-rails *c*, trucks within the same, wires *m*, 10 connected to the trucks and passing through the uprights, pulleys *h'*, and perforated shelves *i* within the uprights for guiding the wires, substantially as specified.

JOSEF LINDNER.

Witnesses:

MORITZ GRUBER,
F. V. BRIESEN.