

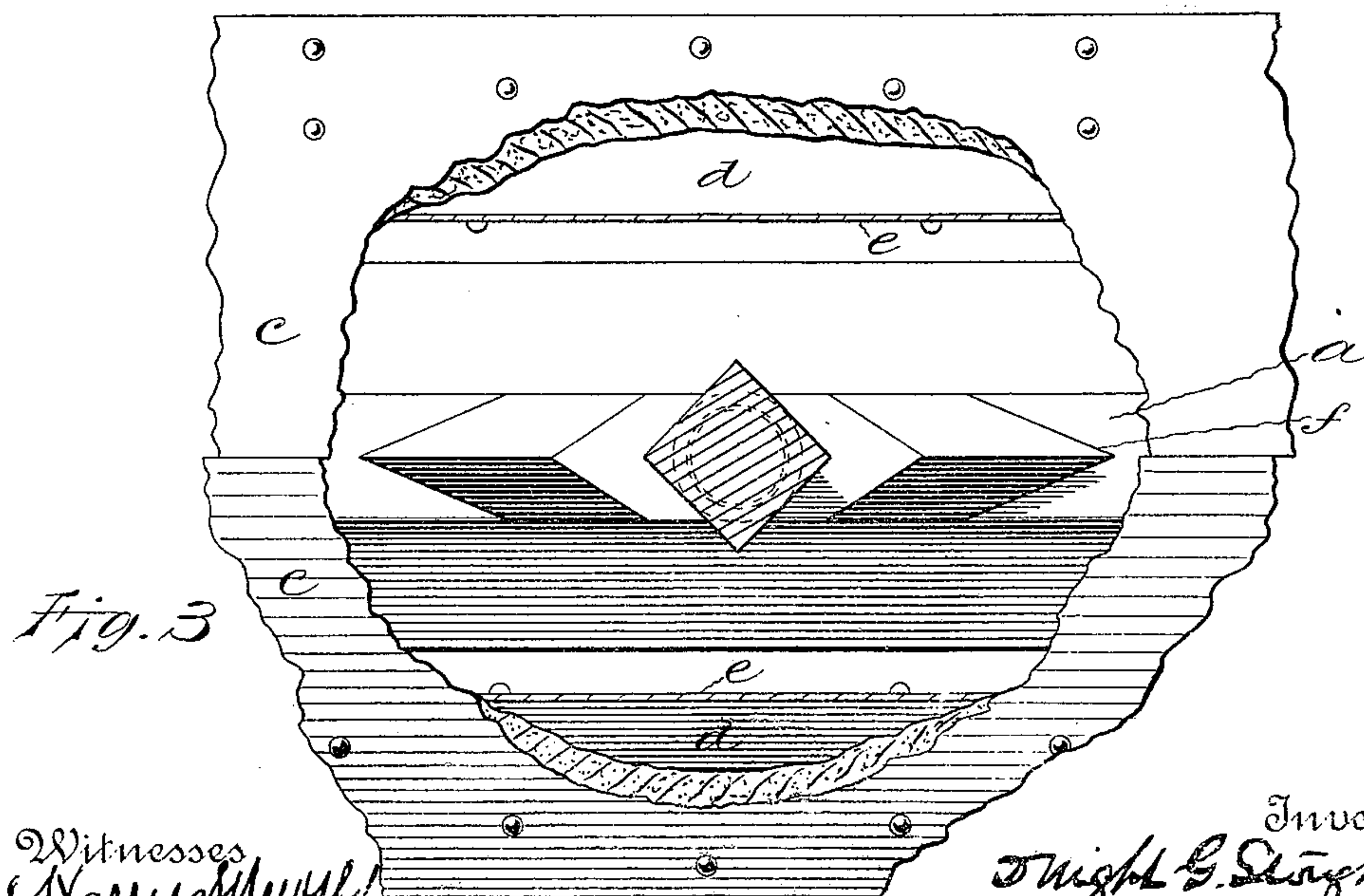
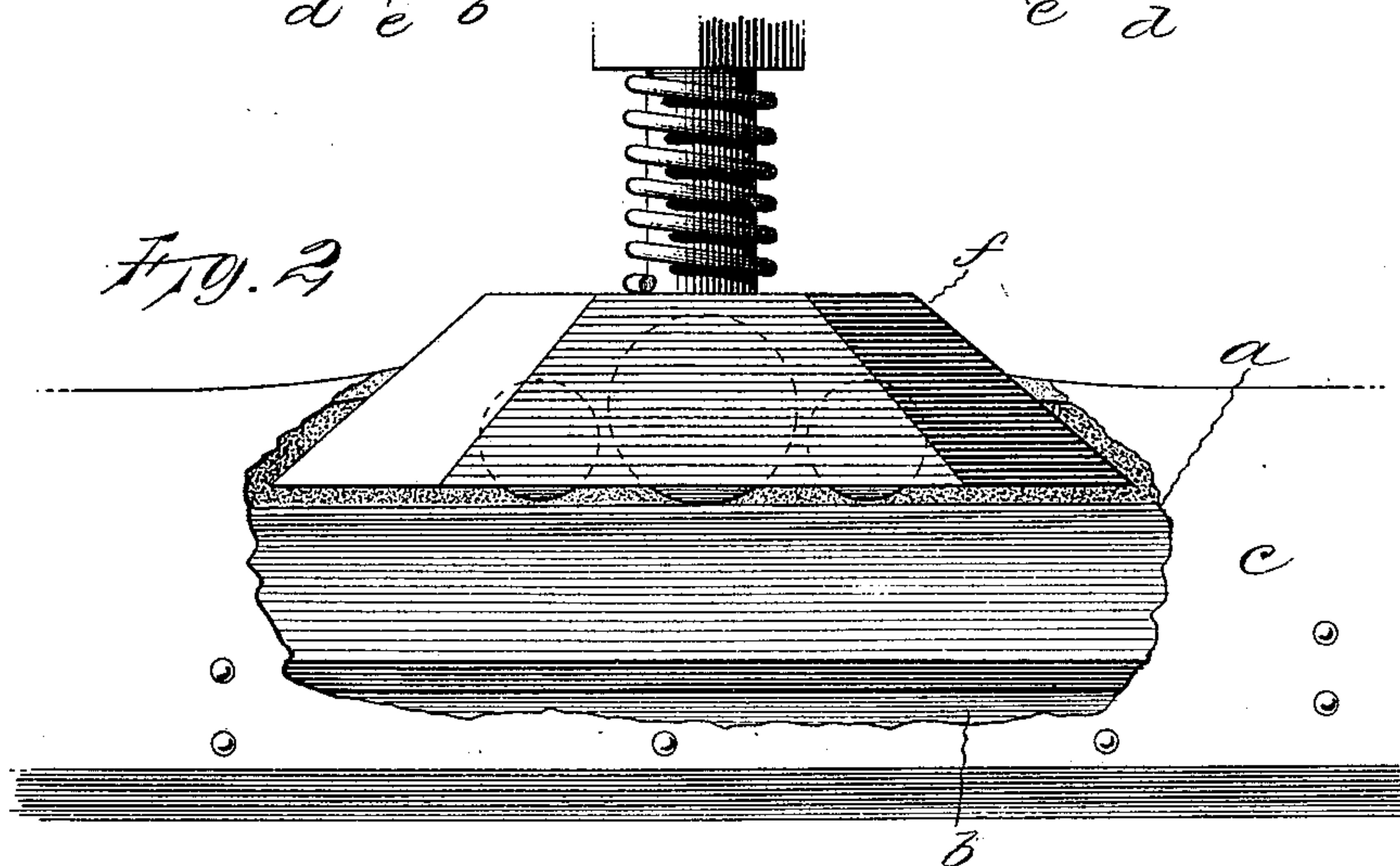
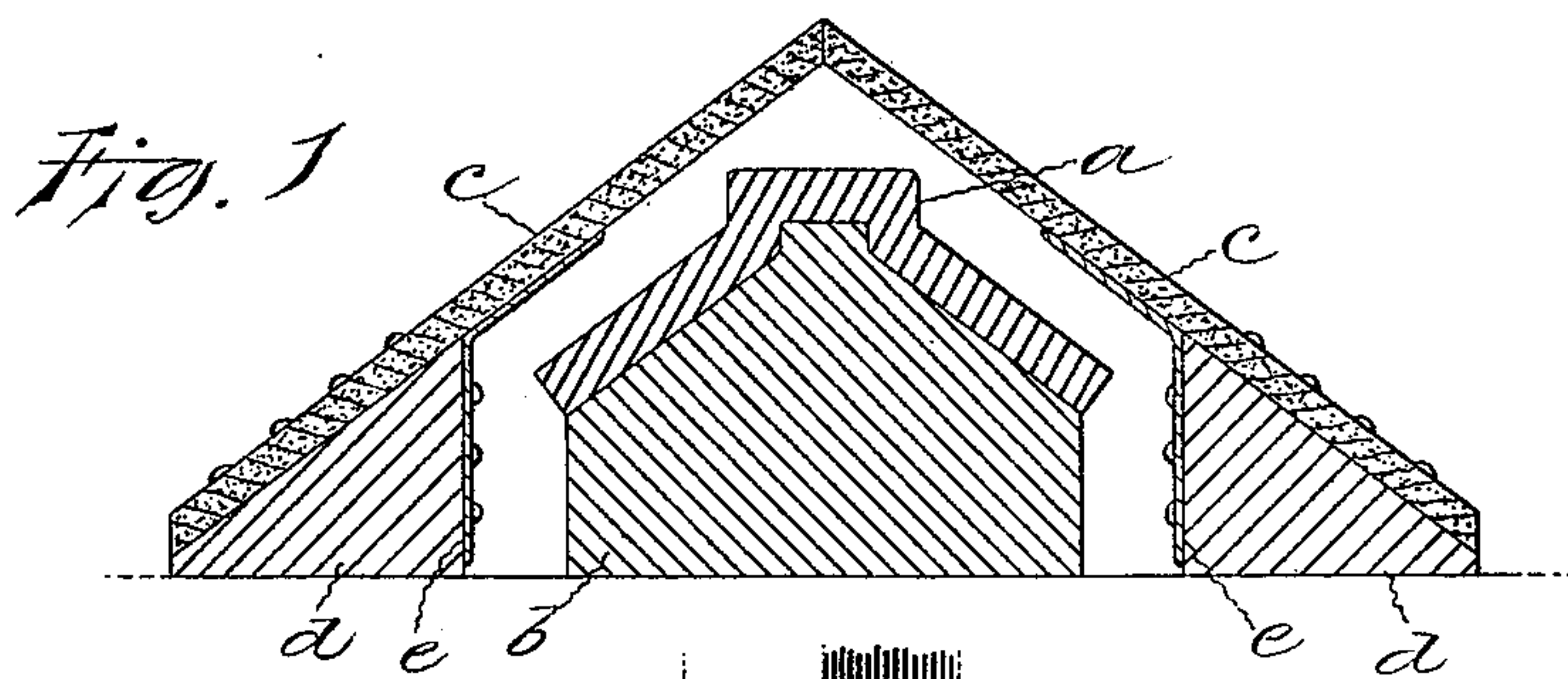
No. 624,124.

Patented May 2, 1899.

D. G. STOUGHTON.
ELECTRIC LINE CONDUCTOR.

(Application filed June 17, 1897.)

(No Model.)



Witnesses
Harry M. W. H.

C. E. Buckland

Inventor
Dwight G. Stoughton
By *W. E. Schmidt*
Attorney

UNITED STATES PATENT OFFICE.

DWIGHT G. STOUGHTON, OF HARTFORD, CONNECTICUT.

ELECTRIC LINE CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 624,124, dated May 2, 1899.

Application filed June 17, 1897. Serial No. 641,084. (No model.)

To all whom it may concern:

Be it known that I, DWIGHT G. STOUGHTON, a citizen of the United States of America, residing at Hartford, in the county of Hartford and State of Connecticut, have invented a certain new and useful Improvement in Line Conductors for Electrically-Propelled Conveyances, of which the following is a description, reference being had to the accompanying drawings, wherein—

Figure 1 is a view in vertical cross-section of the electric line conductor and the non-conductive flexible covering-leaves, showing the means for supporting the same. Fig. 2 is a side view of the electric line conductor, the covering-leaves, and the traveling contact-piece with a part of one of the leaves broken away. Fig. 3 is a top view of the parts with parts of the covering-leaves broken away.

The improvement pertains to an electric line conductor situated underneath an electrically-propelled car.

In the accompanying drawings the letter *a* denotes the electric line conductor—that is, the main conductor of the electric energy. It is herein represented as made in lengthwise sections with sloping sides, the sections duly connected each to the other and fastened to and supported upon an insulating-base *b*.

The letters *c* denote non-conductive flexible leaves covering the electric line conductor, made of a material the nature of which it is to tend to return to the normal position when forced out of that position and to keep the conductor normally covered. India-rubber or rubber composition well fulfils these requirements. These covering-leaves are duly supported by the supports *d* and the angle-iron *e*, the former beneath the outer edge and the latter beneath the center thereof. These leaves converge—that is, slope toward each other—so that they may shed rain and the like, and it is preferred that they meet and touch at a line centrally over the middle of but remote from the rail *a*.

The letter *f* denotes the traveling contact piece or shoe carried by the car, which latter travels upon two rails after an ordinary fashion, the electric line conductor *a* being a so-called "third rail," situated, preferably, midway between the two ordinary rails. It is the function of this contact piece or shoe to take electric energy from the third rail and transmit it to the motor carried upon the car.

The covering-leaves are in lengthwise sections placed end to end. The end or ends of the traveling contact piece or shoe, which is supported by the car in the ordinary manner, are beveled or sharpened to a degree that they may force the covering-leaves apart as the contact-piece moves along the third rail, it being designed that these coverings should close together by their own inherent quality as soon as the traveling contact-piece passes and permits that. It is one special purpose and function of these covering-leaves to so seclude and cover the electric line conductor as to prevent injury to man and beast by accidental contact with the electric line conductor, which necessarily carries an electric current dangerous to life.

Especial advantage is claimed for the angle-iron supports *e* above mentioned, one arm of each of which is secured to the inner face of the support *d* and the other to the lower face of the leaf *c* and extends from said support *d* upward and inward for some distance beneath said leaf, but terminates short of its free inner edge. The latter is therefore permitted to have a certain degree of flexibility, and by its own weight and that of the ice, snow, or water thereon it normally and readily resumes its natural position after the passage of the shoe, which of course spread apart or separated the meeting edges of the leaves sufficiently to give it access to the conductor.

I claim as my improvement—

In an electric conduit, the combination with a line conductor, and an insulated base for the same, of supports, angle-irons within the conduit having their lower arms secured to the inner face of said supports their upper arms inclining inwardly and upwardly but not meeting over the conductor, and flexible non-conducting leaves secured only to the upper faces of the supports and resting on the upper arms of the angle-irons, completely covering both, extending inward and meeting at a point over the conductor, and their outer edges attached without superimposed elements to the upper faces of said supports, as and for the purpose set forth.

DWIGHT G. STOUGHTON.

Witnesses:

W. E. SIMONDS,

HARRY S. NEWSHAFEN.