

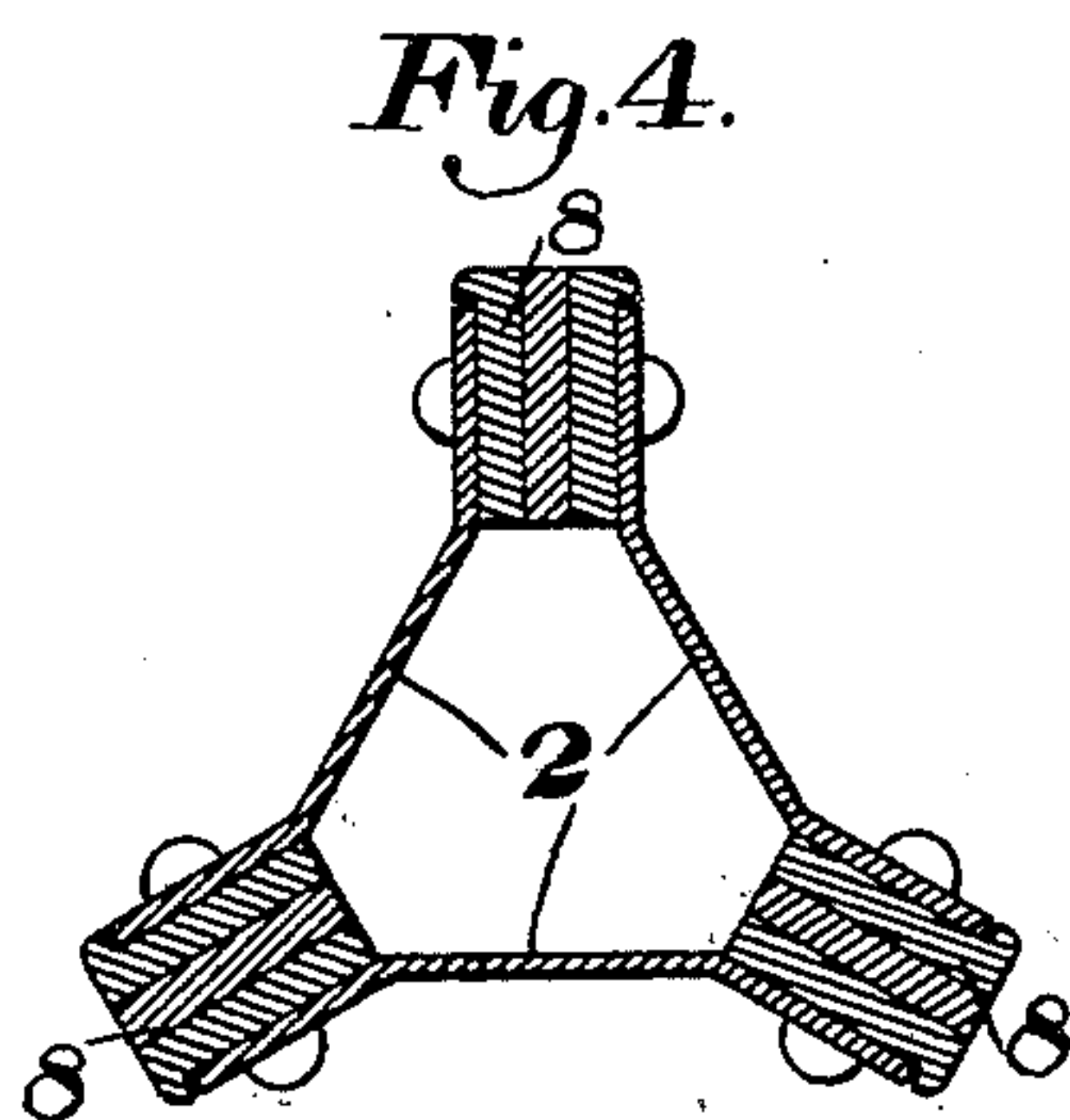
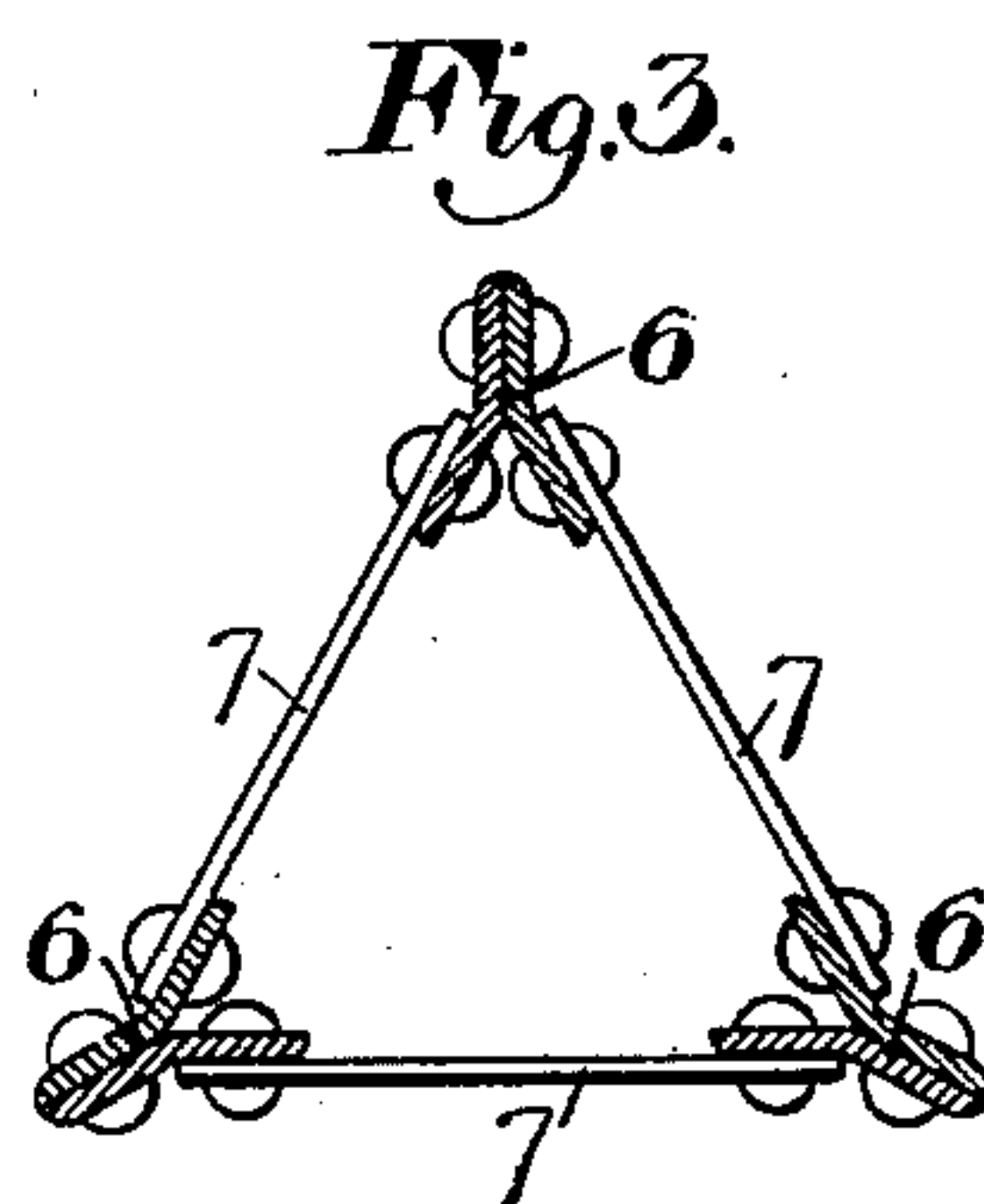
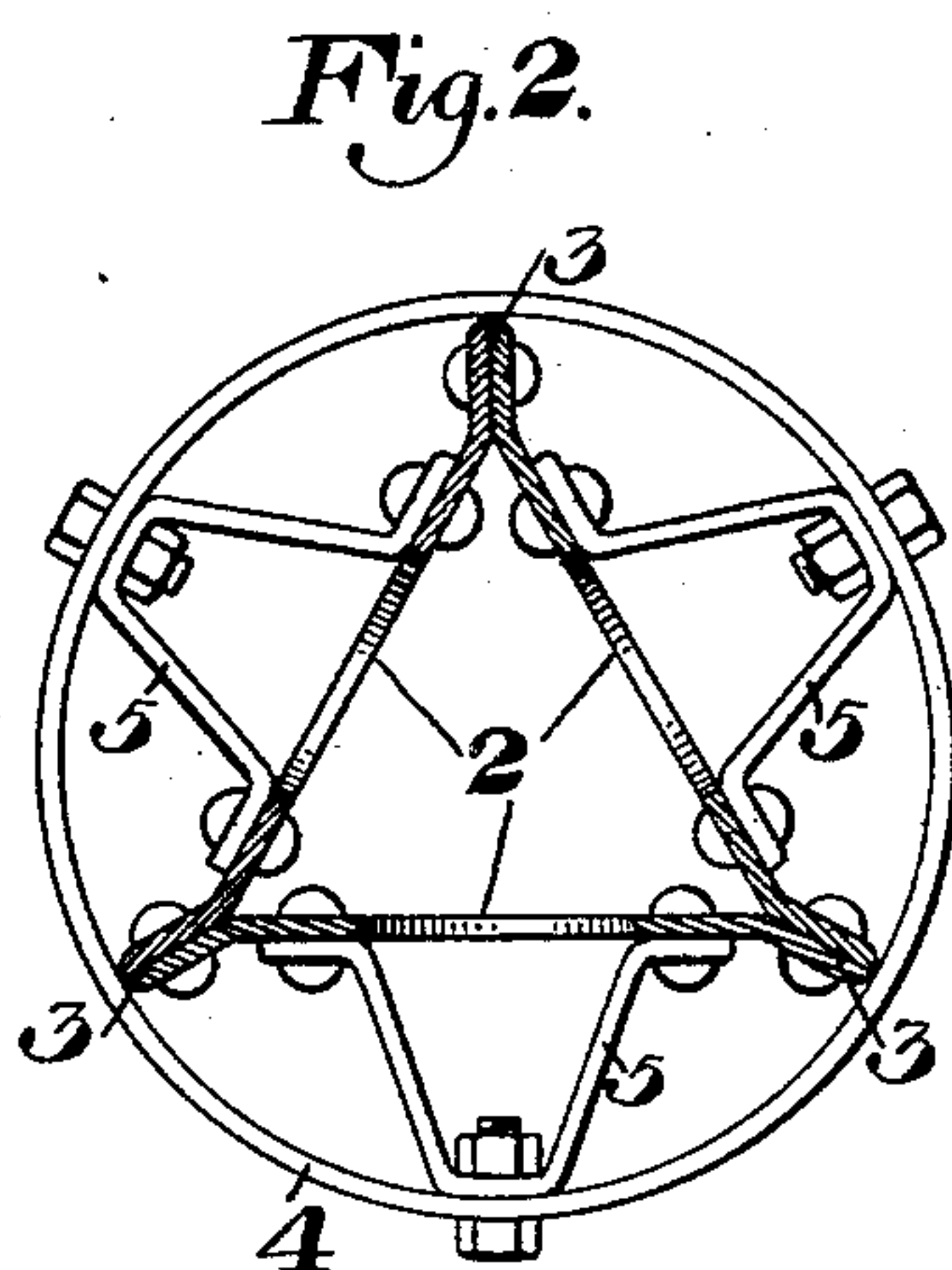
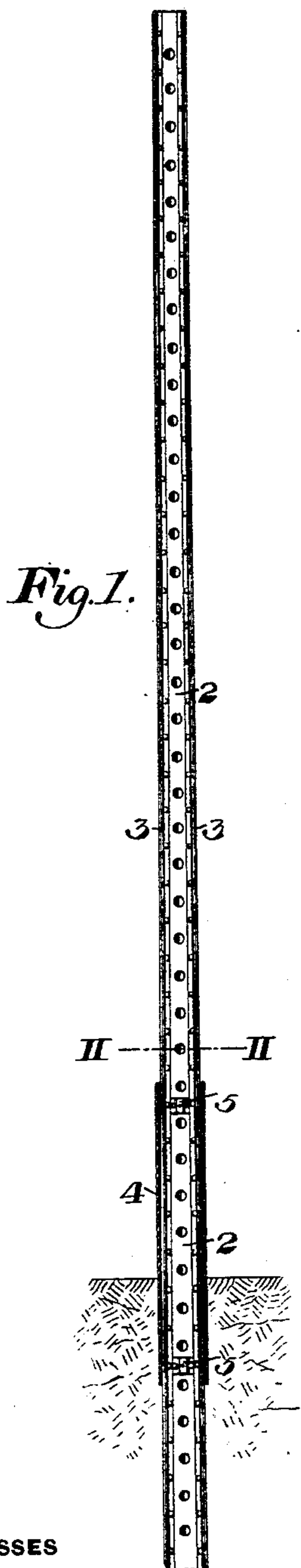
No. 677,090.

Patented June 25, 1901.

J. LANZ.  
TRIANGULAR POLE.

(Application filed Sept. 20, 1899.)

(No Model.)



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN LANZ, OF PITTSBURG, PENNSYLVANIA.

## TRIANGULAR POLE.

SPECIFICATION forming part of Letters Patent No. 677,090, dated June 25, 1901.

Application filed September 20, 1899. Serial No. 731,063. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN LANZ, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Triangular Poles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation, partly broken away, of my improved pole. Fig. 2 is a cross-section on the line II II of Fig. 1, and Figs. 3 and 4 are cross-sections showing modified constructions of the pole.

My invention relates to poles or columns, and is designed to provide a triangular column of cheap and simple construction wherein the metal shall be distributed in such a way as to afford maximum resistance to strain.

To that end it consists in a triangular column having an increased amount of metal at the apices over that in the intermediate portion.

It also consists in the construction and arrangement of the parts, as hereinafter more fully described, and set forth in the claims.

In the drawings I show a column composed of three channel-sections 2, having a series of holes formed in their webs, which webs taper continuously from the bottom to the top of the pole. The channels are pressed into shape from plates, and are secured together by rivets extending through their flanges 3. These flanges extend radially or in planes passing through the center of the triangle. I preferably provide this pole with a casing 4, which is bolted to brackets 5, riveted to the webs of the channels. The casing extends for a short distance above and below the ground-level, as shown in Fig. 1.

Instead of using channels for the body of the pole I may form the pole, as shown in Fig. 3, of pairs of angles 6, the outer flanges of which are riveted together to form the cor-

ners of the column, their inner flanges being interconnected by latticing 7, riveted thereto.

As shown in Fig. 4, I preferably increase the amount of metal at the corners by adding plates 8, which are riveted to the flanges and may be located either between them, as shown, or on the outside, as desired. I thus distribute the metal as far as possible away from the center of the pole, and hence increase its resistance.

It will be noted that in all the forms shown the metal is increased at the corners over that in the intermediate portions, thus reinforcing these corners.

The advantages of the invention result from the strength, cheapness, and ease of construction of the pole and its high resisting power.

Many changes may be made in the form and arrangement of the sections without departure from my invention, since

What I claim is—

1. A triangular pole composed of three channels having perforated tapering webs, and having their flanges secured together to form the corners, substantially as described.

2. A pole composed of plates secured together, said plates being tapered so as to form when secured together a pole which tapers in all directions at the ground-level, and a tubular casing surrounding the pole and extending a short distance above and below the ground-level.

3. A triangular tapered pole composed of plates secured together and having a tubular casing surrounding the same, and brackets fastened to the sides of the pole and to the casing.

In testimony whereof I have hereunto set my hand.

JOHN LANZ.

Witnesses:

H. M. CORWIN,

GEO. B. BLEMMING.