

No. 881,682.

PATENTED MAR. 10, 1908.

G. E. HARRISON & G. BURNS.  
SHIELD FOR THE USE OF LINEMEN.

APPLICATION FILED AUG. 1, 1907.

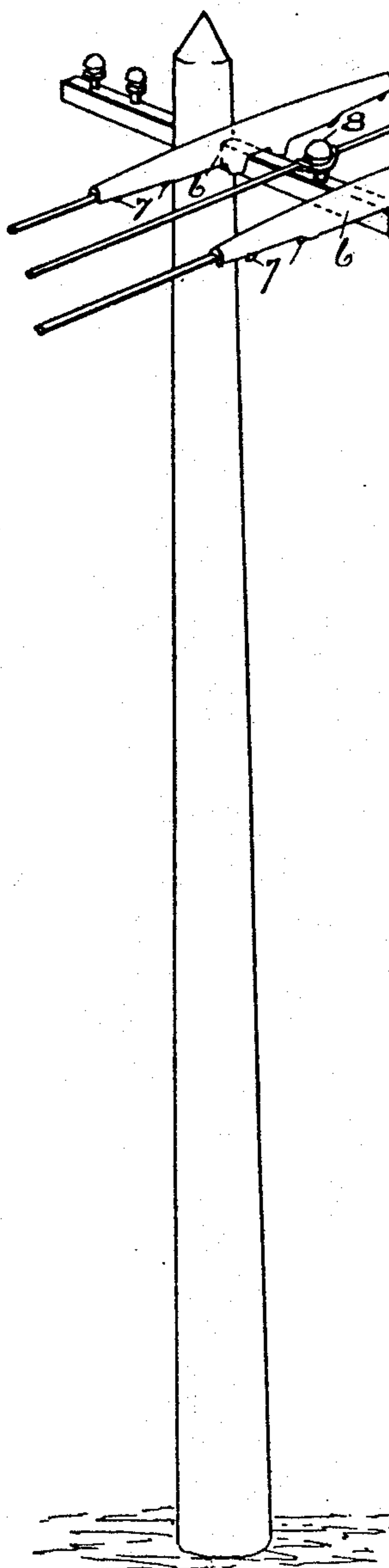


Fig. 3.

Witnesses

May E. Kott.  
W. C. Jennings

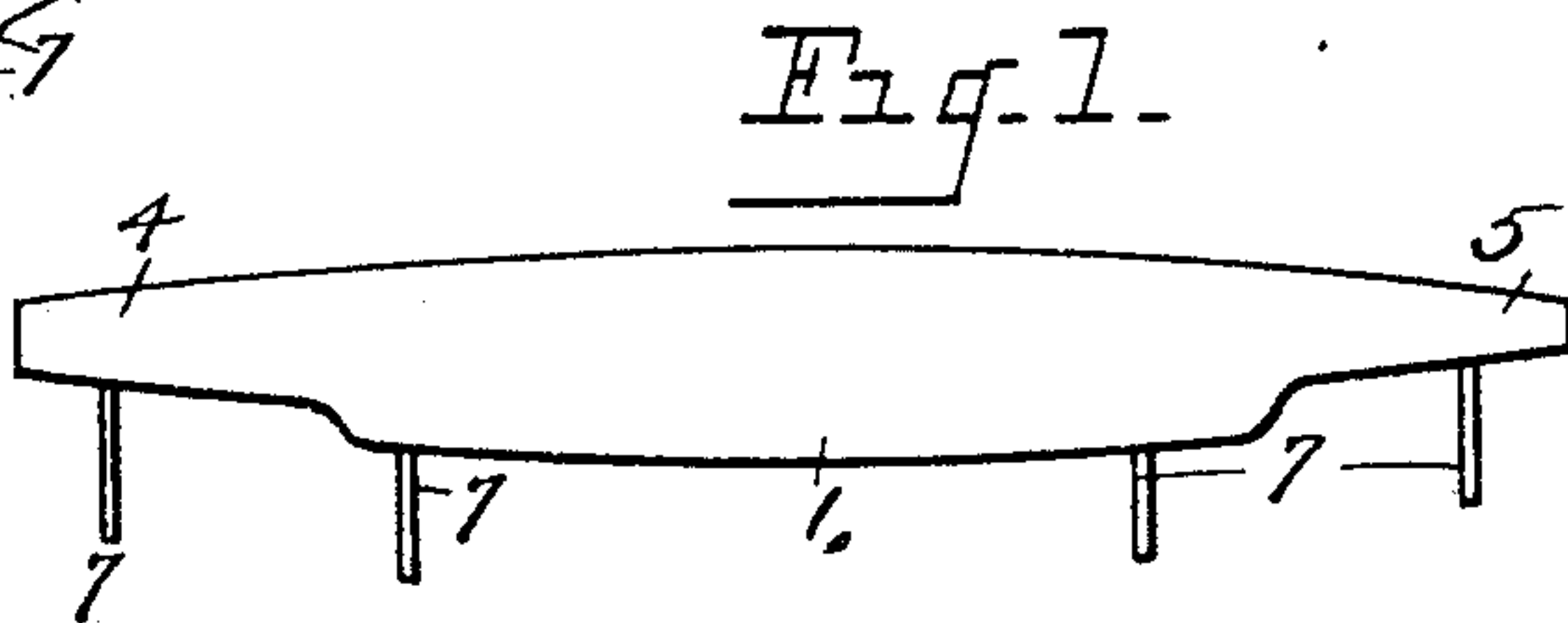


Fig. 1.

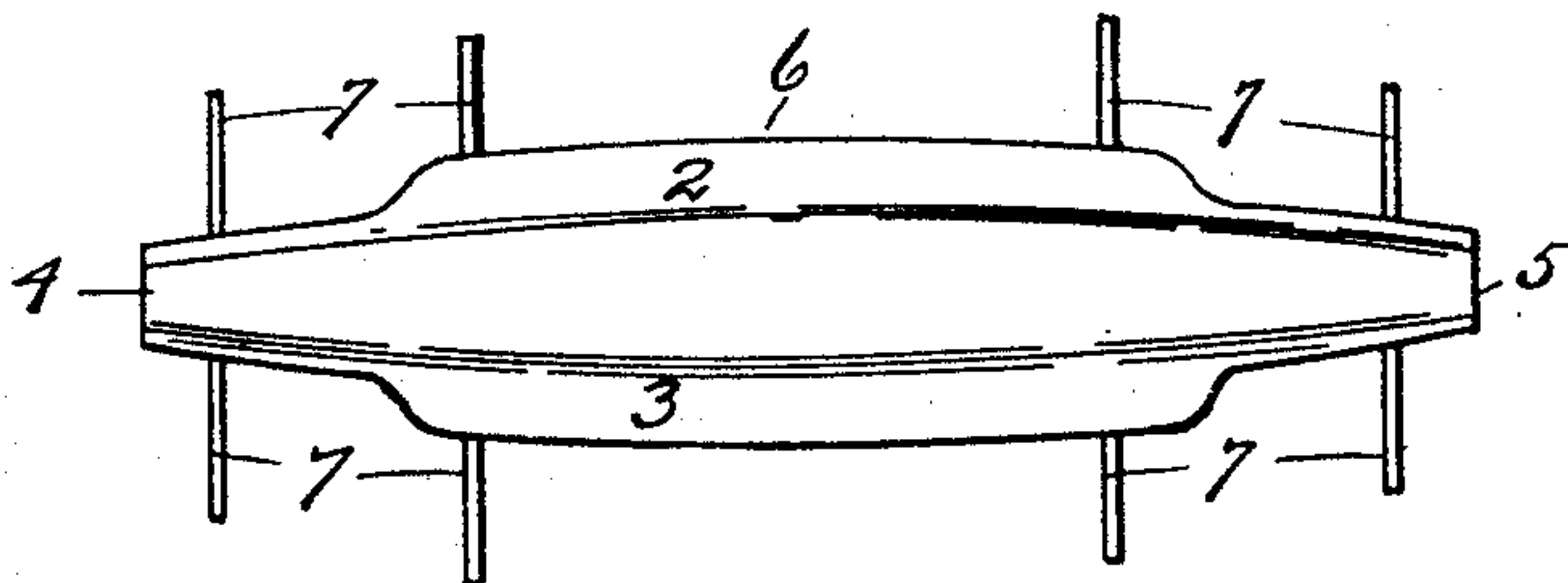


Fig. 2.

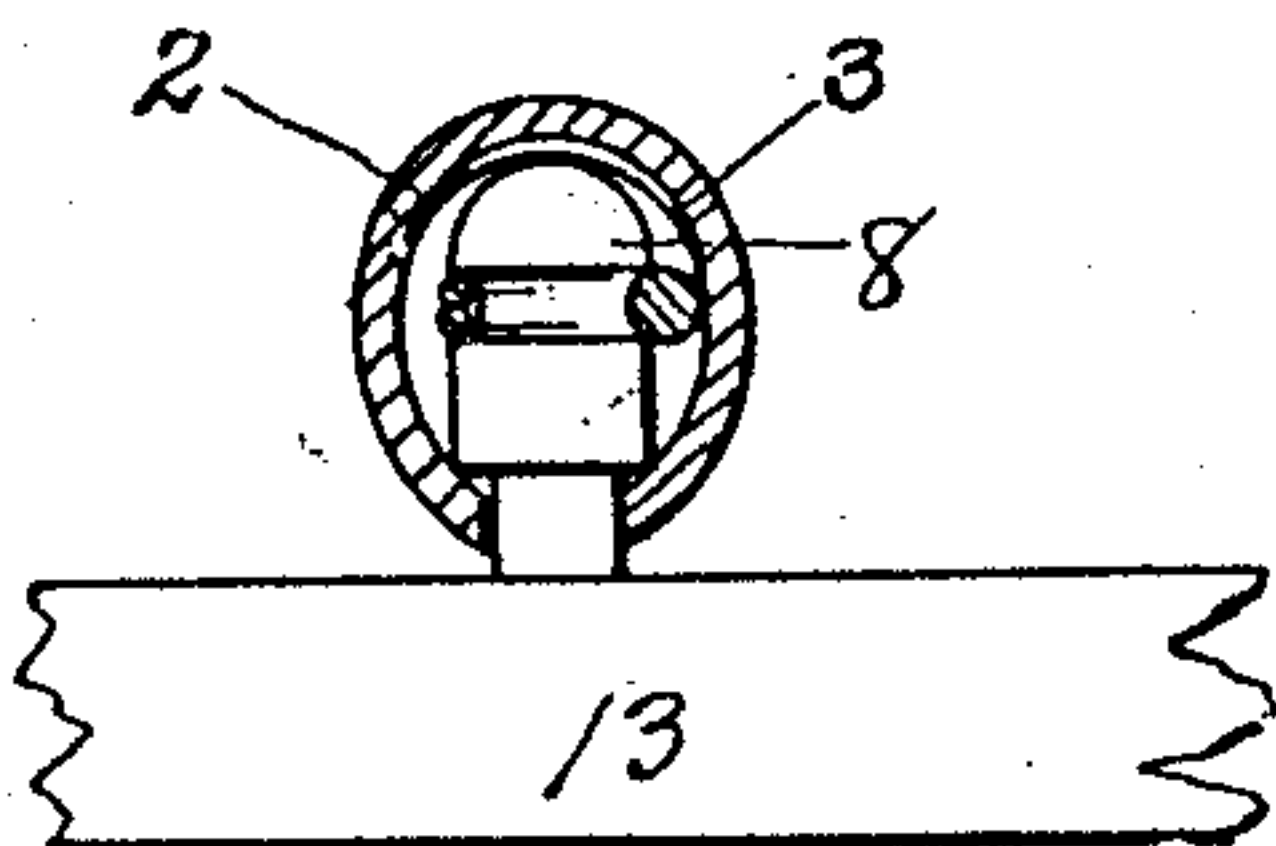


Fig. 4.

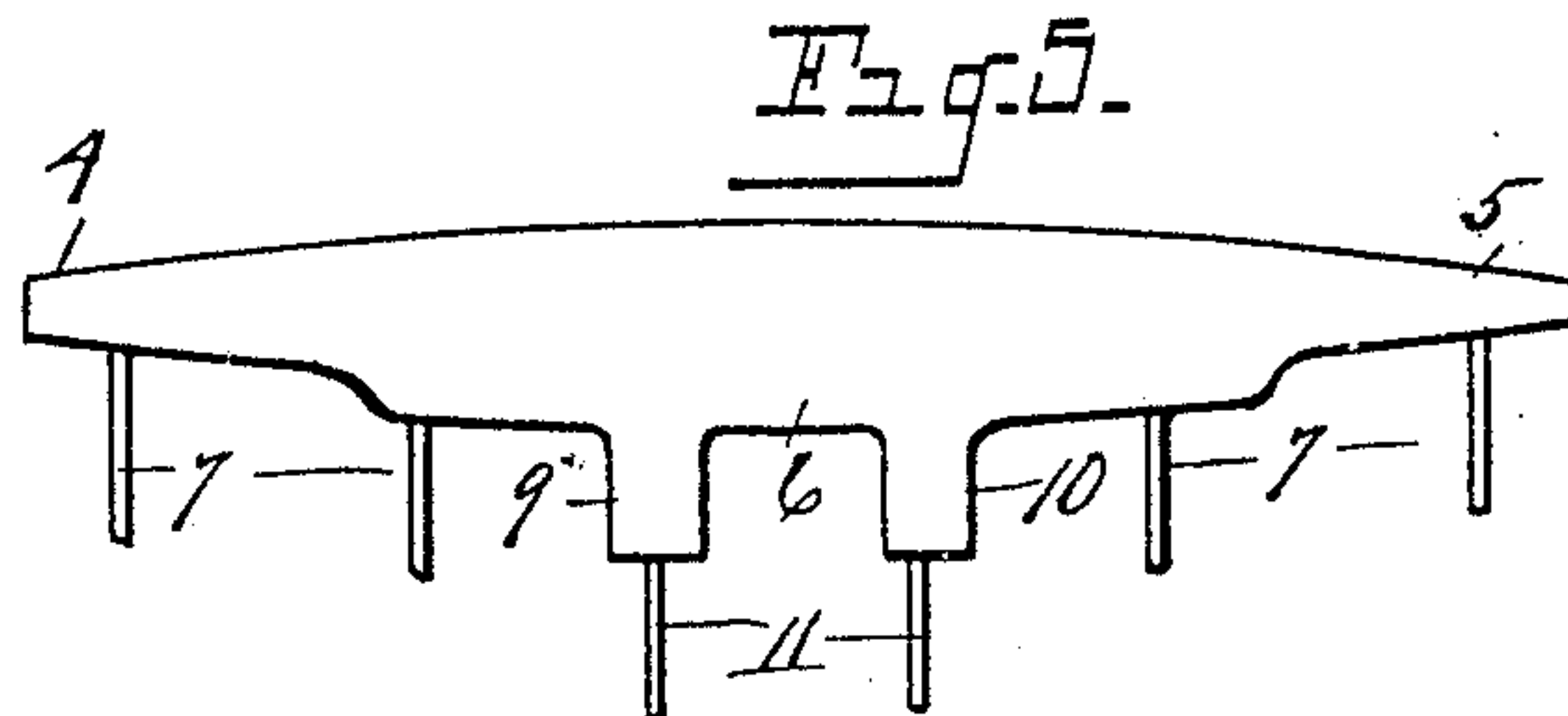


Fig. 5.

Inventor

George E. Harrison  
George Burns.  
Parker & Burton

Attorneys



# UNITED STATES PATENT OFFICE.

GEORGE E. HARRISON AND GEORGE BURNS, OF DETROIT, MICHIGAN.

## SHIELD FOR THE USE OF LINEMEN.

No. 881,682.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed August 1, 1907. Serial No. 386,575.

*To all whom it may concern:*

Be it known that we, GEORGE E. HARRISON and GEORGE BURNS, citizens of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Shields for the Use of Linemen, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to shields for the use of linemen employed in the erecting and repairing of electric wires, and it has for its object a shield or guard adapted to be applied to that part of an electric wire that passes over the cross-arm of a wire support and guards the same against accidental contact with the operator who is erecting or repairing such line.

Repair work especially when made on lines carrying high tension currents is dangerous, often productive of very serious accidents, quite frequently causing the death of the operator, and the object of this invention is to produce a guard which shall entirely cover up a long section of the wire or long sections of wires adjacent to the wires on which he is operating or about to operate.

In the drawings:—Figure 1, is a side elevation. Fig. 2, is a plan of the shield opened out. Fig. 3, shows the shield in use on the cross-arm of the wire carrying pole. Fig. 4, shows a cross section of the guard along a wire. Fig. 5, is a side elevation of a guard with flaps to embrace the cross-arm.

The guard is composed of a thick mass of flexible insulating material, preferably combined rubber and fiber or canvas heavily coated on the inside at the part 1, between the dotted lines 2 and 3 with almost pure vulcanized rubber, which is held in place by a backing of mingled webbing or fiber and rubber, making the entire guard very strong and firm. In outline the guard is a long oval with the ends 4 and 5 adapted to

be rolled into tubular form and normally in vulcanizing, made to roll automatically in a tubular form. The wider middle part 6 also rolls into tubular form, but makes a tube of larger diameter than the end parts 4 and 5. Both margins are preferably provided with tapes 7, of webbing which may be tied together after the shield has been placed along the wire and the shield thus secured firmly in place so that it cannot accidentally escape.

In use, the shield is placed over the cross-arm which supports the line wire embracing a portion of the wire at the side of the cross-arm and embracing the insulating knob 8 to which the wire is fastened.

A modified form of the shield shown in Fig. 5, has in addition to the main or body part shown in Figs. 1 and 2, flaps 9 and 10, to which are affixed tying tapes 11, which can be used to bring the edges of the guard into close contact with the cross-arm 13, and will serve to prevent the guard from slipping endwise along the wire, although generally the tapes 7 are sufficient for perfect security, or it can be used without tying the tapes.

The essential feature of the guard consists in the heavy mass of insulating material of a character sufficiently flexible to enable it to be folded or wrapped around the wire and the support upon which the wire is mounted; this support occupies a space many times as large as the wire which it sustains and the guard must be made large enough to in-fold it.

A feature of the great utility is found in the construction by which the shield rolls itself automatically into tubular form, as when thus constructed the necessity of tying the parts together with tape is not always present, and need only be used as a matter of extraordinary precaution.

What we claim is:—

1. A lineman's guard against high tension electric currents, comprising a shield of non-conducting flexible material adapted to be rolled into tubular terminals of small diameter at the ends and to form a housing of

larger diameter at the central part, substantially as described.

- 5 2. A lineman's guard, comprising a shield of flexible material having end parts adapted to be rolled into tubes of small diameter, and a central part, and means for securing the shield in position on the wire, substantially as described.

In testimony whereof, we sign this specification in the presence of two witnesses.

GEORGE E. HARRISON  
GEORGE BURNS.

Witnesses:

CHARLES F. BURTON,  
MAY E. KOTT.