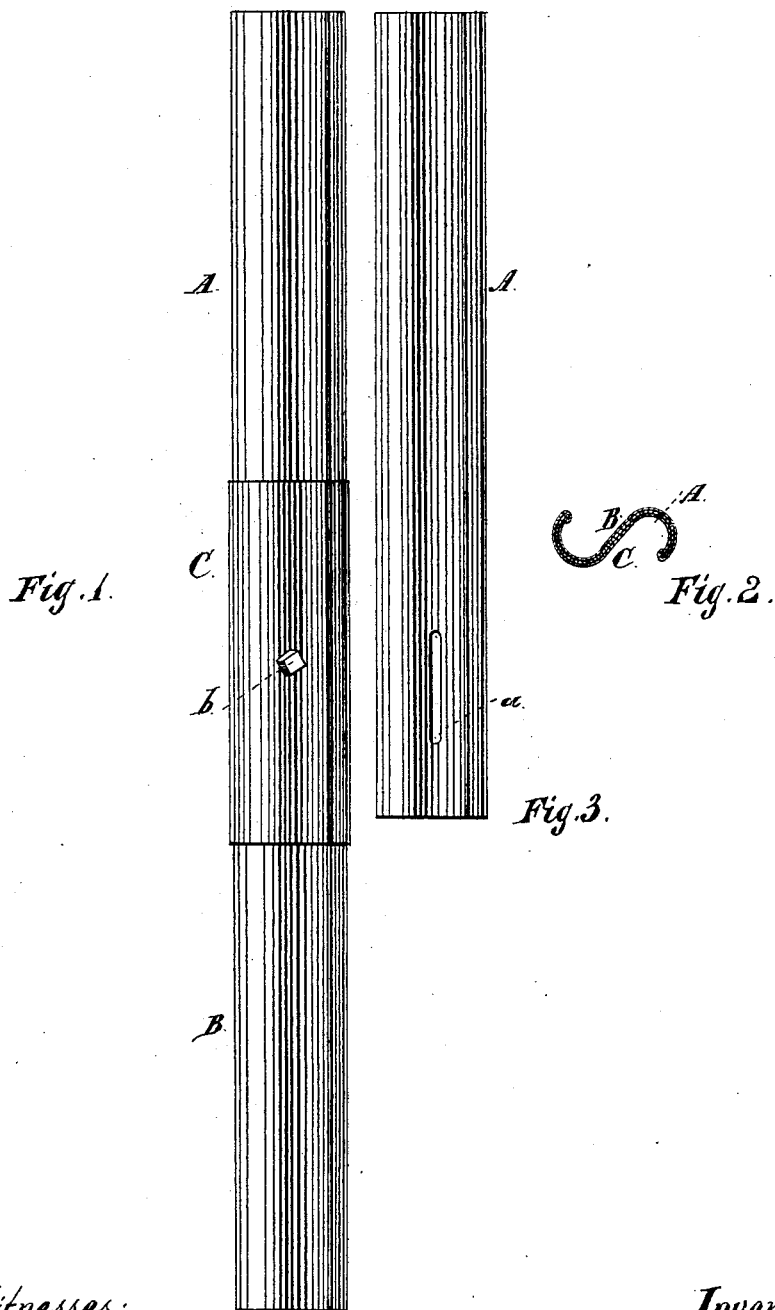


L. BRADLEY.

COUPLING FOR LIGHTNING-RODS

No. 189,298.

Patented April 10, 1877.



Witnesses:
L. L. Bond
O. W. Bond.

Inventor:
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UNITED STATES PATENT OFFICE.

LUCIEN BRADLEY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN COUPLINGS FOR LIGHTNING-RODS.

Specification forming part of Letters Patent No. **189,298**, dated April 10, 1877; application filed June 5, 1876.

To all whom it may concern:

Be it known that I, LUCIEN BRADLEY, of the city of Chicago, Cook county, State of Illinois, have invented a new and useful Improvement in Lightning-Rods, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side view; Fig. 2, a cross-section, and Fig. 3 a view of one section of the rod detached.

The object of this invention is to construct a corrugated or fluted lightning-rod in sections, and to so connect the sections that their contraction or expansion will not spring the rod or disturb its fastenings; and its nature consists in providing one end of the sections with a socket, and the other end with a slot, through which the locking-bolt or other fastening of the socket passes, so that the sections of the completed rod may contract or expand without impairing the contact of the sections or disturbing the fastenings.

In the drawings, A represents that portion of a section which is provided with a slot; B, the end of a connecting section that is provided with a socket; C the socket; *a*, the slot, and *b* a bolt or other device for locking the sections together.

The sections A B are made of any suitable material, and are most cheaply made of hoop or thin bar iron. They may be formed from the ordinary flat metal by corrugating or fluting it, or they may be rolled into the desired shape as the bars or sections are manufactured. They may be twisted or not, as desired. The socket C is made by placing a piece of thin metal having the same conformation as the section to its side at one end, so that the sec-

tion will form one side of the socket, and it is held in place by bending the edges around, as shown at Fig. 3; or the added piece may be secured by one or more rivets. This mode of forming the socket gives a liberal contact of the sections, and is therefore preferred. The sockets, however, may be made separate and complete, and be fastened to one end of each section, so that when the sections are put together their ends will abut, and when so made they may be formed from sheet metal or be cast, and they may also be left open at one side, so that a projection may be formed on the inside to take the place of the bolt *b*, and enter the slot *a*, when the open side is driven down to form a complete socket. This slip-socket and the slot *a* permits a slight independent movement in each section, and, by making the sockets to conform to the figure of the rod, they assist in maintaining its form. This makes a complete lightning-rod, with a large surface for conduction, and one which will not disturb the fastenings by which it is attached to the building.

What I claim as new, and desire to secure by Letters Patent, is—

1. The part A, provided with a slot, *a*, in combination with the part B, provided with the coupling C, substantially as and for the purpose set forth.

2. The part A, provided with a slot, *a*, in combination with the part B, collar C, and the fastening-bolt *b*, constructed and arranged substantially as and for the purpose set forth.

LUCIEN BRADLEY.

Witnesses:

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