(No Model.)

W. HEWITT.

LIGHTNING ROD COUPLING.

No. 287,929. Patented Nov. 6, 1883.

Fig. 1.

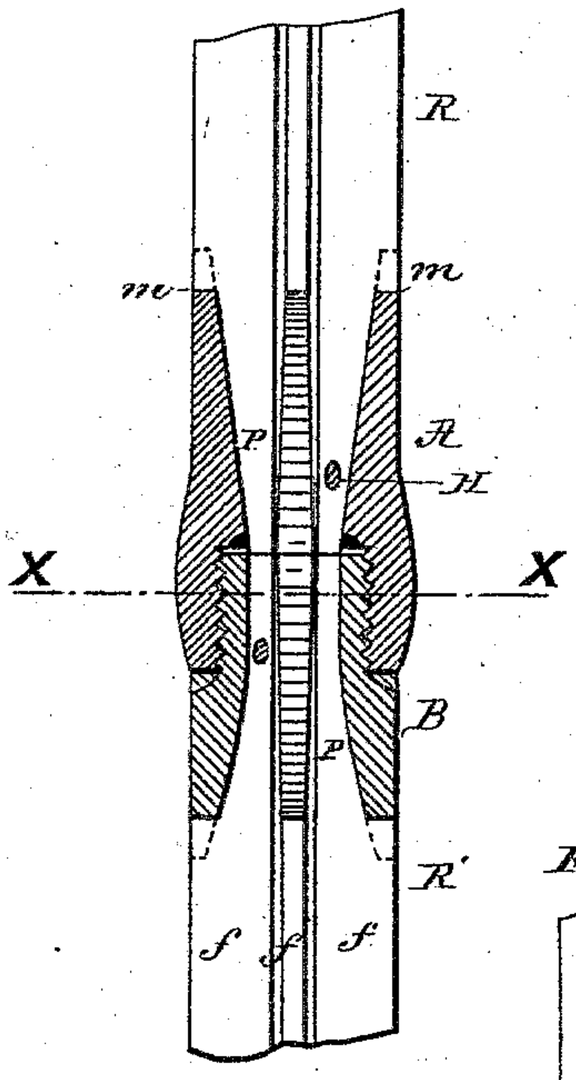


Fig. 2.

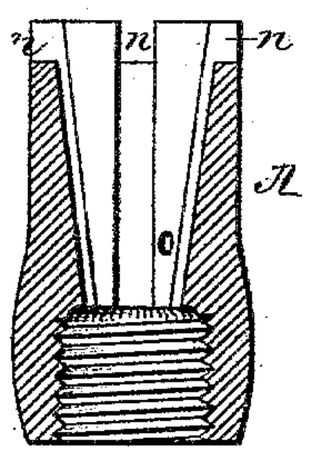


Fig. 3.

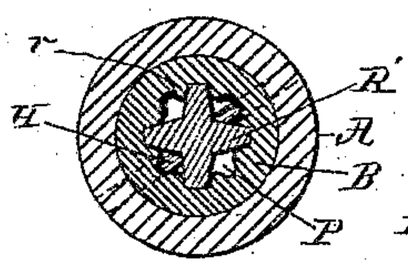


Fig. 5.

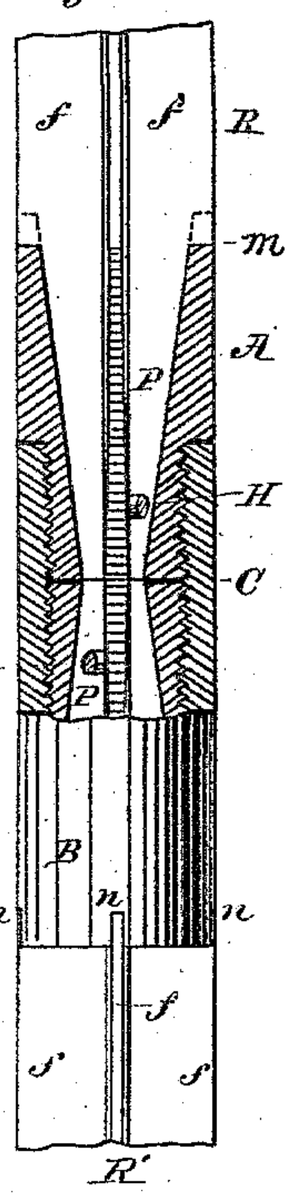
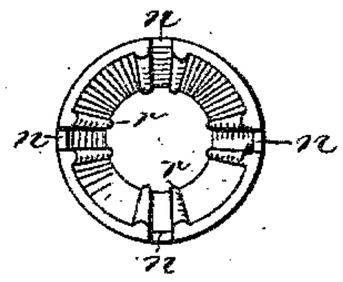


Fig. 4.



WITNESSES—

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UNITED STATES PATENT OFFICE.

WILLIAM HEWITT, OF LONDON, ONTARIO, CANADA.

LIGHTNING-ROD COUPLING.

SPECIFICATION forming part of Letters Patent No. 287,929, dated November 6, 1883.

Application filed February 15, 1881. Renewed June 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HEWITT, of London, in the county of Middlesex, Province of Ontario, and Dominion of Canada, have invented certain new and useful Improvements in Lightning-Rod Couplings; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to joints or couplings for the flanged form of rods. Its principal object is to provide a continuous open passage through the coupling in the line of each groove of the rod; and to this end it consists in applying the coupling to the edges of the flanges, preferably cut away in part to receive it.

It also consists in other features of construction hereinafter set forth, and designated in the claim.

In the drawings, Figure 1 is a central longitudinal section of a coupling applied to connect adjacent sections of flanged lightning-rod in accordance with my invention. Fig. 2 is the upper part of the coupling of Fig. 1 in central longitudinal section and detached. Fig. 3 is a transverse section through *x x* of Fig. 1. Fig. 4 is a top view of the coupling detached. Fig. 5 is a central longitudinal section of an alternative construction.

The same letter indicates the same part in all of the figures.

The distinctive feature of my invention consists in the continuous passage provided through the joint within the coupling, from end to end of the latter, in the line of the several grooves between the rod-flanges. This novel effect may be obtained in connection with several forms of coupling or modes of applying the same, as will be explained. I prefer, however, that form and mode illustrated in Figs. 1, 2, and 3, which will be now described.

R and R′ represent adjacent sections of rod having the flanges *f f*.

A is a part of the coupling fastened to the extremity of one section, R, by a pin, H, and B is a part of the coupling similarly secured to the adjacent section, R′. A is provided with a female screw, and B with a corresponding threaded nipple. In order to make the joint flush with the rod, the flanges of the latter are cut away in tapering form, leaving the shoulders *m* of depth equal to the thickness of the nipple at this point. Notches *n* in the ends of the coupling admit the flanges a short distance and prevent the coupling from turning on the rod. The several sections R R′ of the rod enter the coupling parts A and B far enough to meet where the sections are joined, so as to give continuity to the rod itself, as a conductor, throughout its length independently of the coupling. When the sections are joined, care is taken to bring the flanges and grooves into line, as plainly shown in Fig. 1, thus giving for each groove a continuous passage, P, through the coupling. If desired, shallow ribs *r r* may be provided, between which the tapered part of the flanges will rest, giving, in effect, elongations of the notches *n*, and operating to still further secure the coupling from turning on the rod.

Another construction of the joint, giving the same results as relates to the continuous passage P through the coupling, is shown in Fig. 5, wherein each of the parts A and B is provided with a nipple, one having a right and the other a left hand thread, and the two are connected or drawn together by a right-and-left-threaded sleeve, C, made flush with the adjacent parts. Other connections may be made giving the same effect of a continuous passage, P, through the joint; wherefore, so far as this feature is concerned, I do not limit myself to the specific constructions shown. On the other hand, in view of familiar forms of couplings for lightning-rods, I make no claim on other features of construction shown, except in combination with the specific feature of a continuous passage through the coupling.

A material advantage is found in a joint having the passages described, in the readiness with which water may escape therefrom, as compared with couplings heretofore made for the flanged form of rod. Such other couplings cannot always be made water-tight, and, being retentive of moisture, they are soon corroded, so that the conductivity of the rod is after a time apt to be impaired at the joints. By closely abutting the ends of the rod-sec-

tions and providing, as here shown, for the free and prompt escape of moisture, the joint is, in the first instance, more reliable, and is much less likely to become defective from causes commonly destructive of conductivity in the rod at the joints.

Obviously the joint described is equally applicable to the straight or twisted rod.

I am aware that T-shaped rods have been longitudinally spliced by overlapping their ends, so as to leave a passage between the surfaces overlapped; but such splice does not involve a coupling or third part, as herein shown, and does not therefore contain my invention, which consists in a special construction of a coupling part or parts, whereby said part, while holding the connected rods end to end, also affords longitudinal openings between the rod and coupling, as set forth.

I claim as my invention—

The combination, with the lightning-rod sections R R′, having flanges *f f*, of the coupling parts A and B, supported by the edges of the rod-flanges, whereby a passage, P, is afforded through the coupling in each groove of the rod, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

WILLIAM HEWITT.

Witnesses:
M. E. DAYTON,
W. C. ADAMS.