

(No Model.)

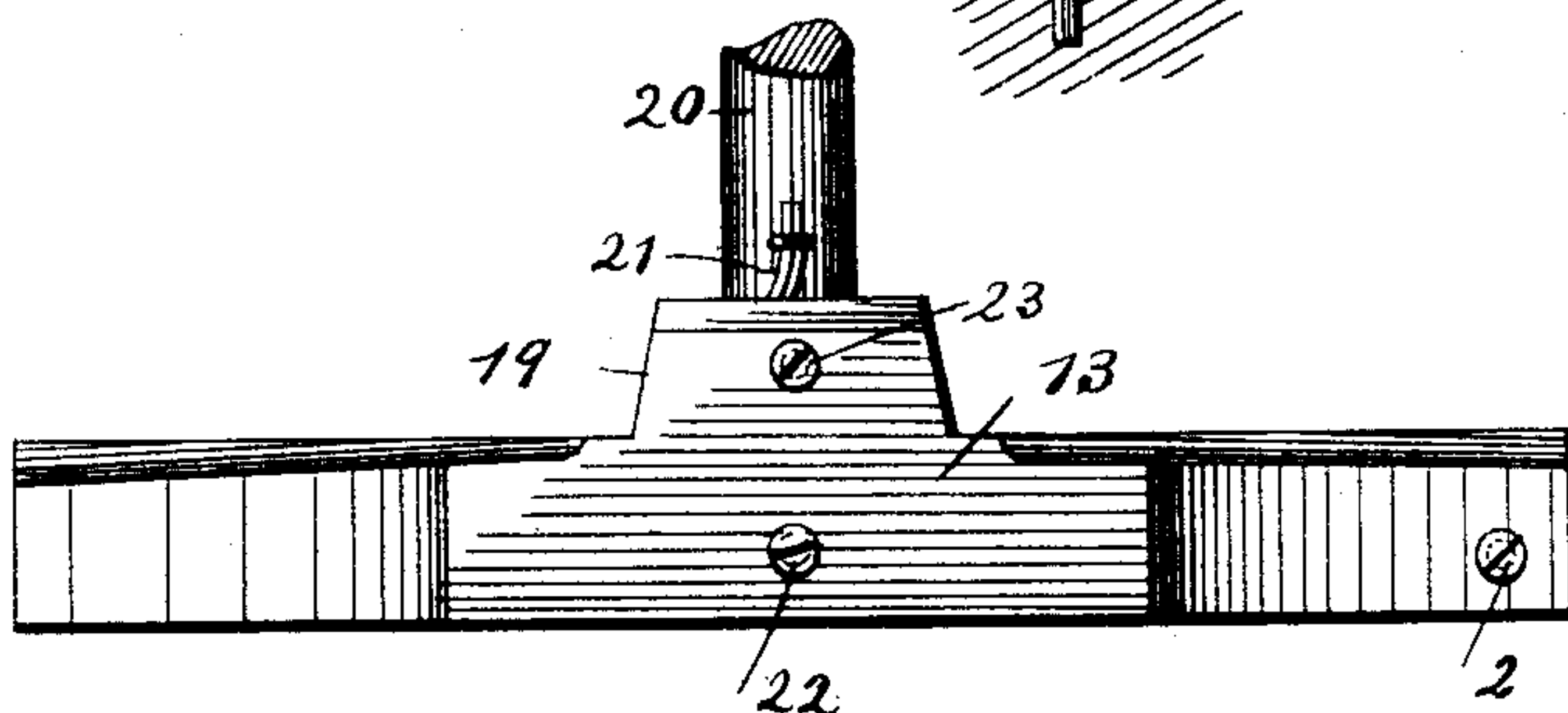
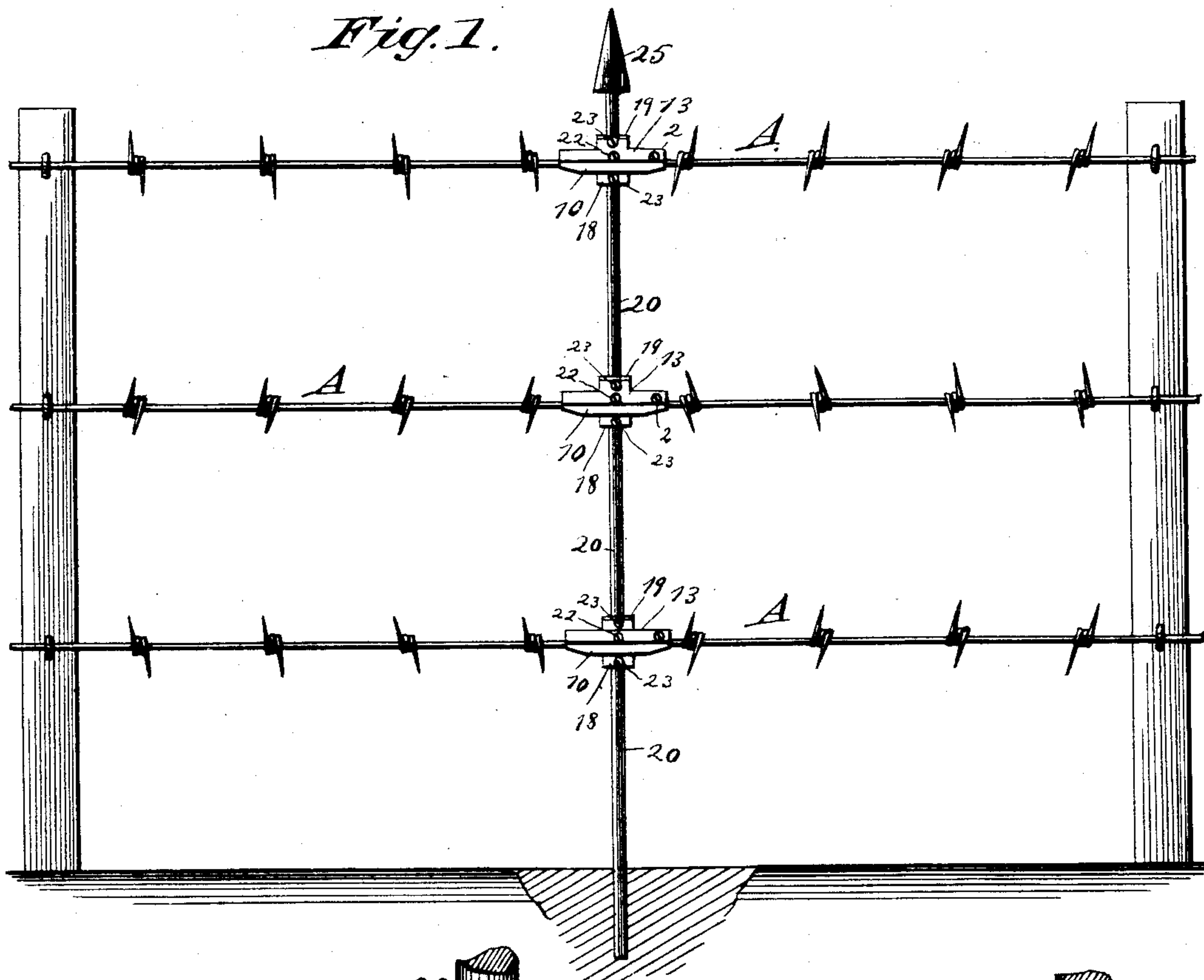
2 Sheets—Sheet 1.

F. E. WOOD.  
LIGHTNING CONDUCTOR FOR WIRE FENCES.

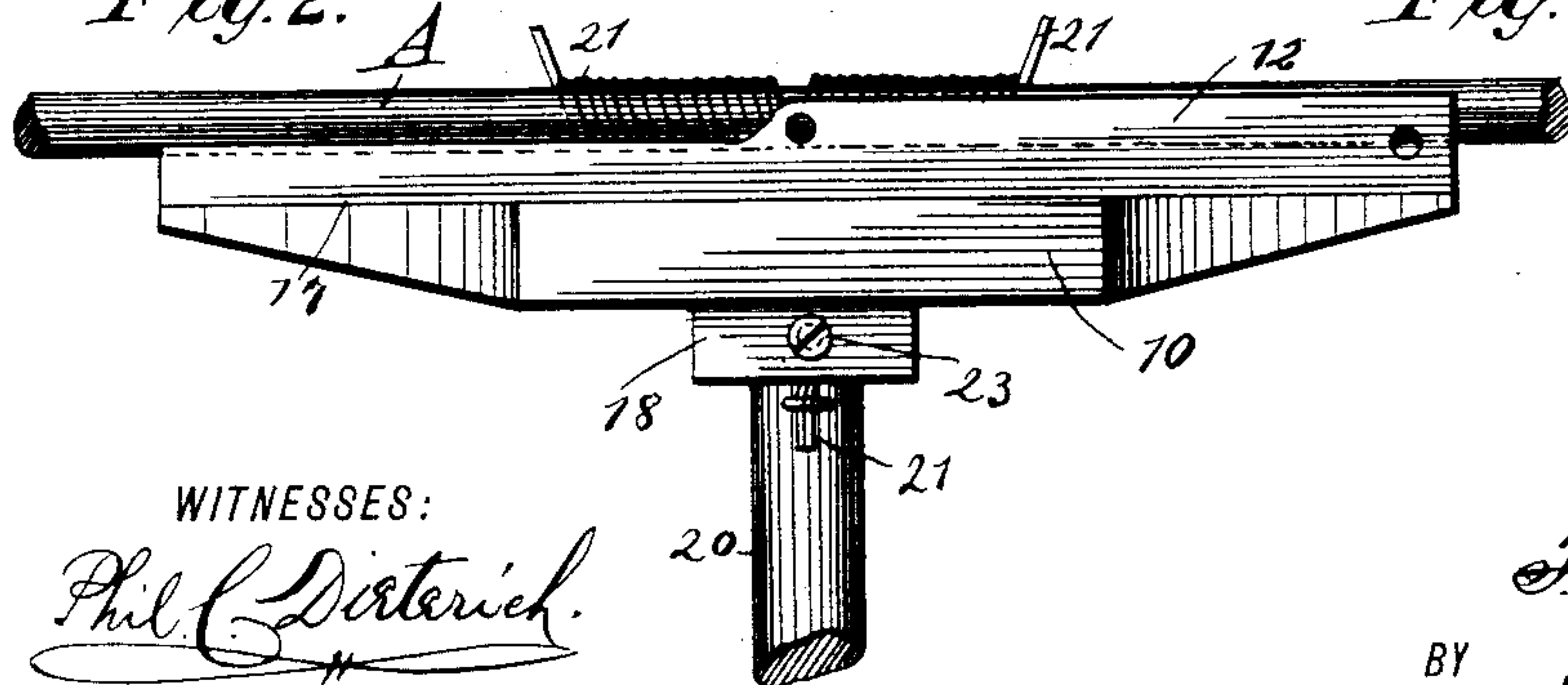
No. 401,095.

Patented Apr. 9, 1889.

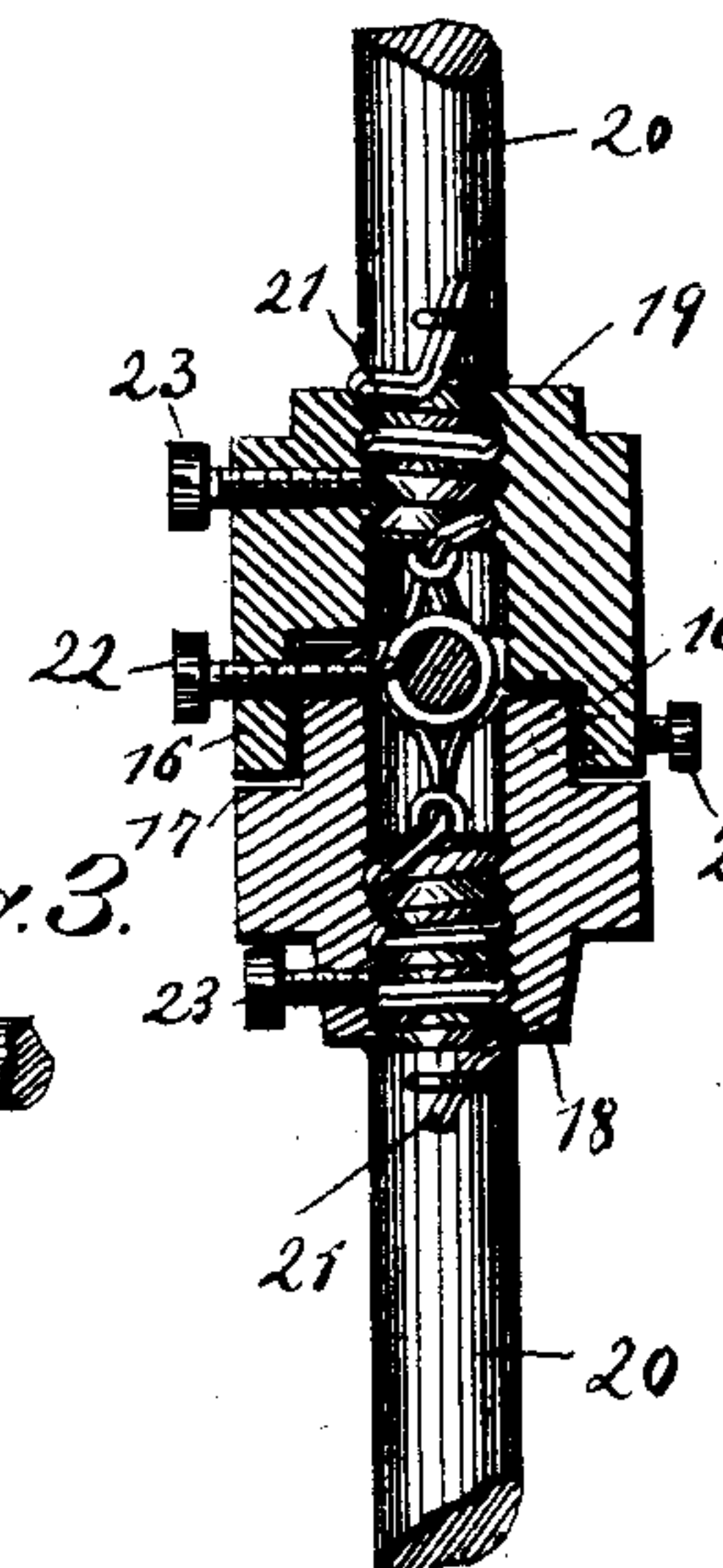
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Phil. C. Dieterich.*  
*C. Sedgwick.*

INVENTOR:

*F. E. Wood*  
BY *Munn & Co.*

ATTORNEYS.

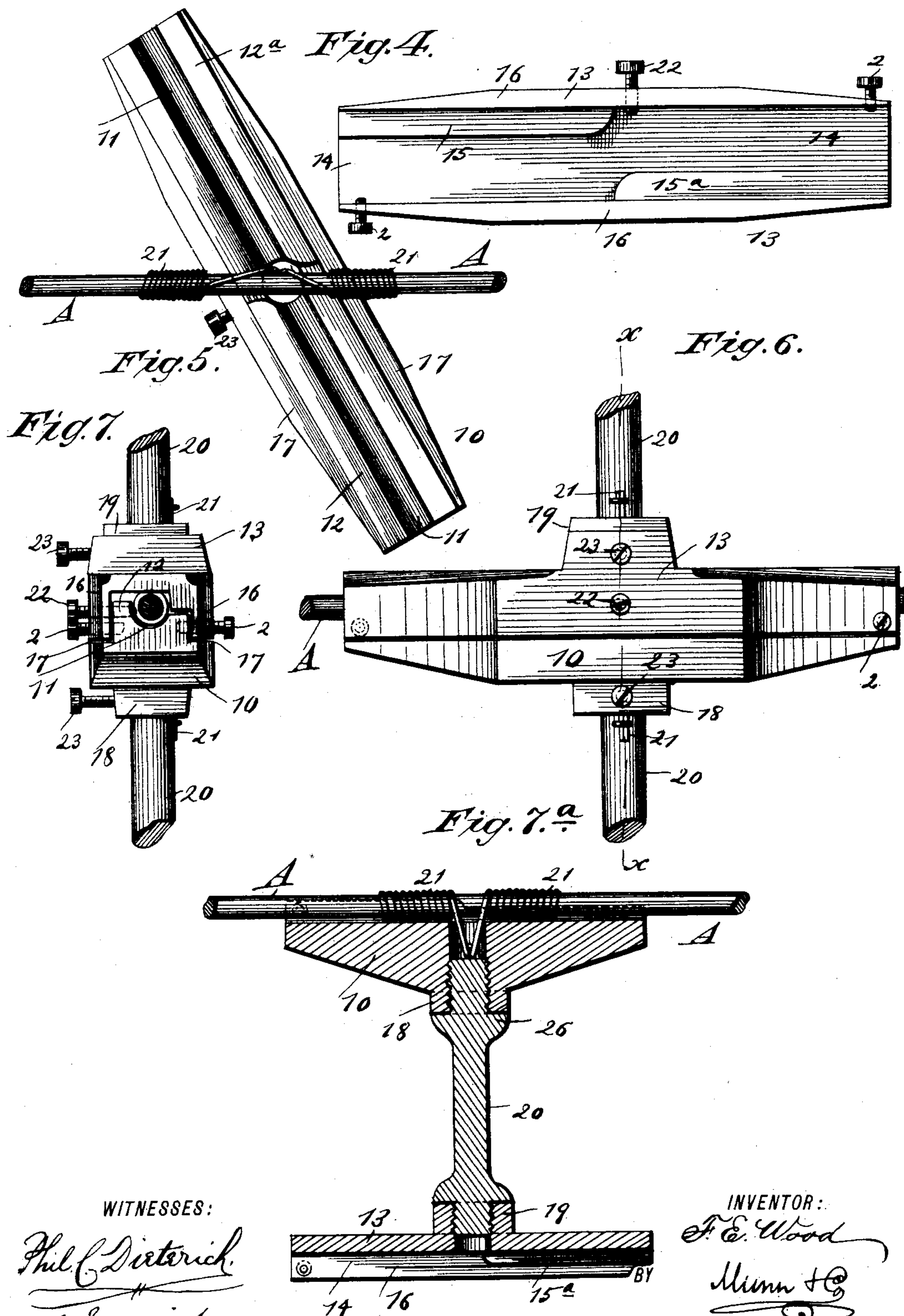
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# UNITED STATES PATENT OFFICE.

FREMONT E. WOOD, OF YUCCA, ARIZONA TERRITORY.

## LIGHTNING-CONDUCTOR FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 401,095, dated April 9, 1889.

Application filed November 28, 1888. Serial No. 292,058. (No model.)

### *To all whom it may concern:*

Be it known that I, FREMONT E. WOOD, of Yucca, in the county of Mojave and Territory of Arizona, have invented a new and Improved  
5 Lightning-Conductor for Wire Fences, of which the following is a full, clear, and exact description.

One of the greatest objections to the present form of wire or barbed-wire fences is that in  
10 electric storms the wires of the fence attract the electric fluid, and as the wires are usually practically insulated from the ground it frequently happens that the current passing over the wires discharges through the body of an  
15 animal standing close to the wires, severe losses of stock having occurred in this way.

It is to overcome the danger to stock that I have devised the invention forming the subject-matter of this application; and to this  
20 end the invention consists in the particular construction and arrangement of parts, all as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying  
25 drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of a section of a fence,  
30 representing the same as it appears when provided with my improved lightning-arrester. Fig. 2 is an enlarged detail view of a portion of the arrester, the two clamping-sections being represented as they appear when separated. Fig. 3 is a cross-sectional view on line  
35 *xx* of Fig. 6. Fig. 4 is an inverted plan view of the upper clamp-section. Fig. 5 is a plan view of the lower clamp-section, representing the same as it appears when being applied to  
40 the fence-wire. Fig. 6 is a side view of the clamp. Fig. 7 is an end view of the same, and Fig. 7<sup>a</sup> is a central sectional view of the lower portion of one clamp and the upper portion of another clamp.

45 In the drawings I have illustrated a specific construction for establishing the necessary connection between the main conductor of my arrester and the line-wires of the fence; but I desire it to be understood that any  
50 equivalent or proper connection could be em-

ployed without departing from the spirit of my invention.

In the construction shown, 10 represents the lower portion of a clamping-socket, which said socket is formed with a central longitudinal  
55 groove, 11, upon either side of which there are ribs 12 and 12<sup>a</sup>, the rib 12 running from one end of the clamping-socket to about the middle thereof upon one side of the groove, while the rib 12<sup>a</sup> runs from the other end to  
60 about the center of the socket, but upon the opposite side of the groove.

In connection with the socket-section 10, I employ an upper socket-section, 13, that is formed with a central groove, 14, upon either  
65 side of which there are ribs 15 and 15<sup>a</sup>, so disposed that when the two socket-sections are placed together the said ribs 15 and 15<sup>a</sup> will supplement and complete the ribs 12 and 12<sup>a</sup>,  
70 respectively. Outside of the ribs 15 and 15<sup>a</sup> the section 13 is formed with flanges 16, which said flanges rest upon shoulders 17 of the socket-section 10 when the two socket-sections are adjusted to the position in which they are  
75 shown in Figs. 6 and 7, the two sections being united by screws 2, as shown. The socket-sections 10 and 13 are formed with centrally-apertured and internally-threaded bosses 18  
80 and 19, the thread of one boss being a right-hand thread and the thread of the other a left-hand thread.

The sockets employed in connection with the several wires of the fence are connected by rods 20, said rods being threaded at each end, but in inverse directions, to engage the  
85 threaded apertures of the bosses 18 and 19, a binding-wire, 21, being bound within the threads of the connecting-rods 20 and about the fence-wire, which wire is shown at A, and at the same time the wire 21 is so bound about  
90 the wire A that the sockets may be moved to the position shown in Fig. 5—that is, so as to cross the wire diagonally—the arrangement of the ribs 12 and 12<sup>a</sup> permitting this movement. After the wire 21 has been applied, the two  
95 socket-sections are brought together and united by the screws 2, the wire 21 being forced hard against the wire A by a set-screw, 22, and against the rods 20 by set-screws 23. The lower section of the rod 20 is grounded, 100

as shown in Fig. 1, while to the upper section of said rod there is connected a point, 25. In Fig. 7<sup>a</sup> I illustrate a construction wherein the rod 20 is formed with shoulders 26.

5 In applying the arrester great care should be taken to insure proper connection between all parts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

10 1. In a lightning-conductor for wire fences, the combination of a sectional conductor and clamping-sockets formed of two sections, each section being provided with a longitudinal groove and an aperture at right angles to the  
15 groove, substantially as described.

2. In a lightning-conductor, the combination of the sectional conductor, sectional sockets in which the ends of the sectional con-

ductor are secured, and a connecting or binding wire for connecting the ends of the sectional conductor with the strands of a wire fence, substantially as described. 20

3. A sectional socket consisting of a socket-section, 10, formed with a central groove and ribs 12 and 12<sup>a</sup>, and a socket-section, 13, formed 25 with ribs 15 and 15<sup>a</sup>, and a means, substantially as described, for connecting the sockets, as and for the purpose stated.

4. In a lightning-conductor, the combination, with rods 20, of socket-sections 10 and 30 13, screws 2, a binding-wire, 21, and set-screws, as 22 and 23, substantially as described.

FREMONT E. WOOD.

Witnesses:

B. M. WOOD,

J. J. JEROME.