

(No Model.)

C. E. MATTESON.

DEVICE FOR SUPPORTING WIRE DURING THE PROCESS OF ANNEALING.

No. 415,391.

Patented Nov. 19, 1889.

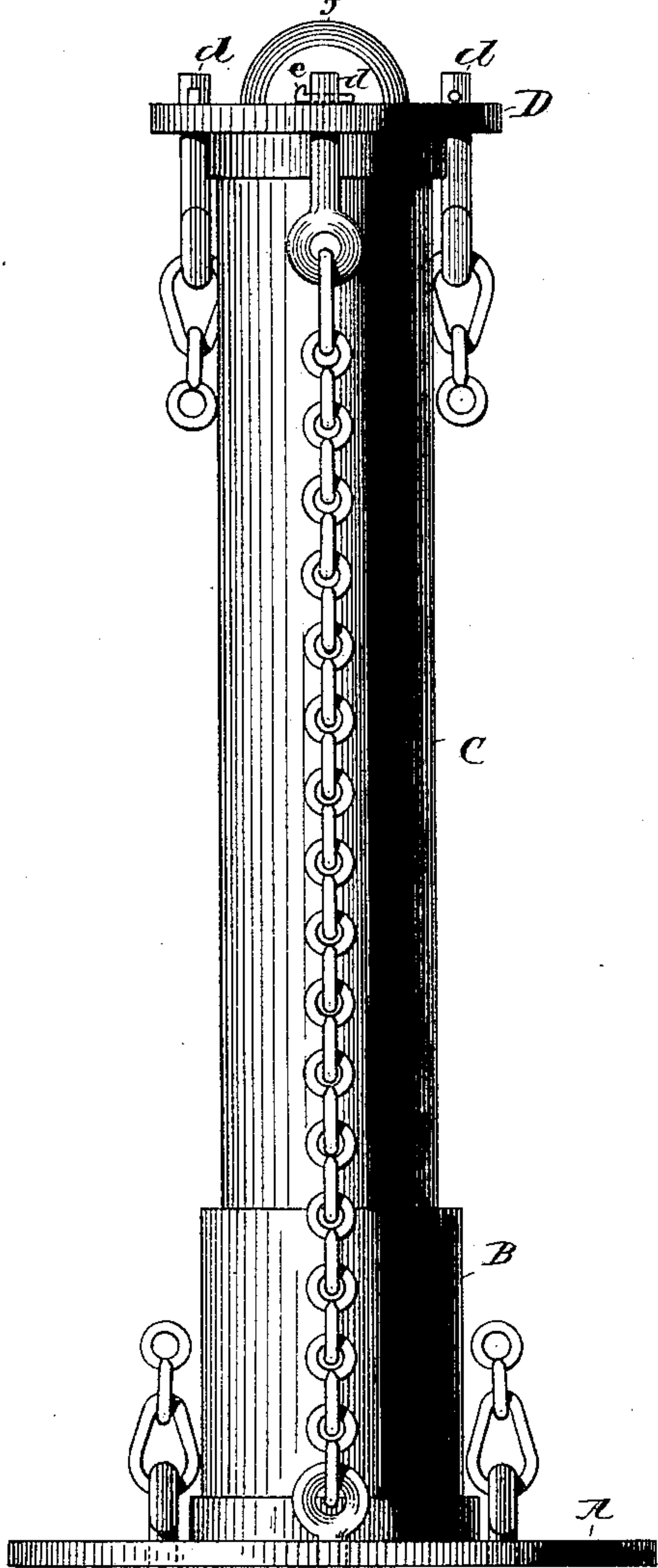


Fig. 1.

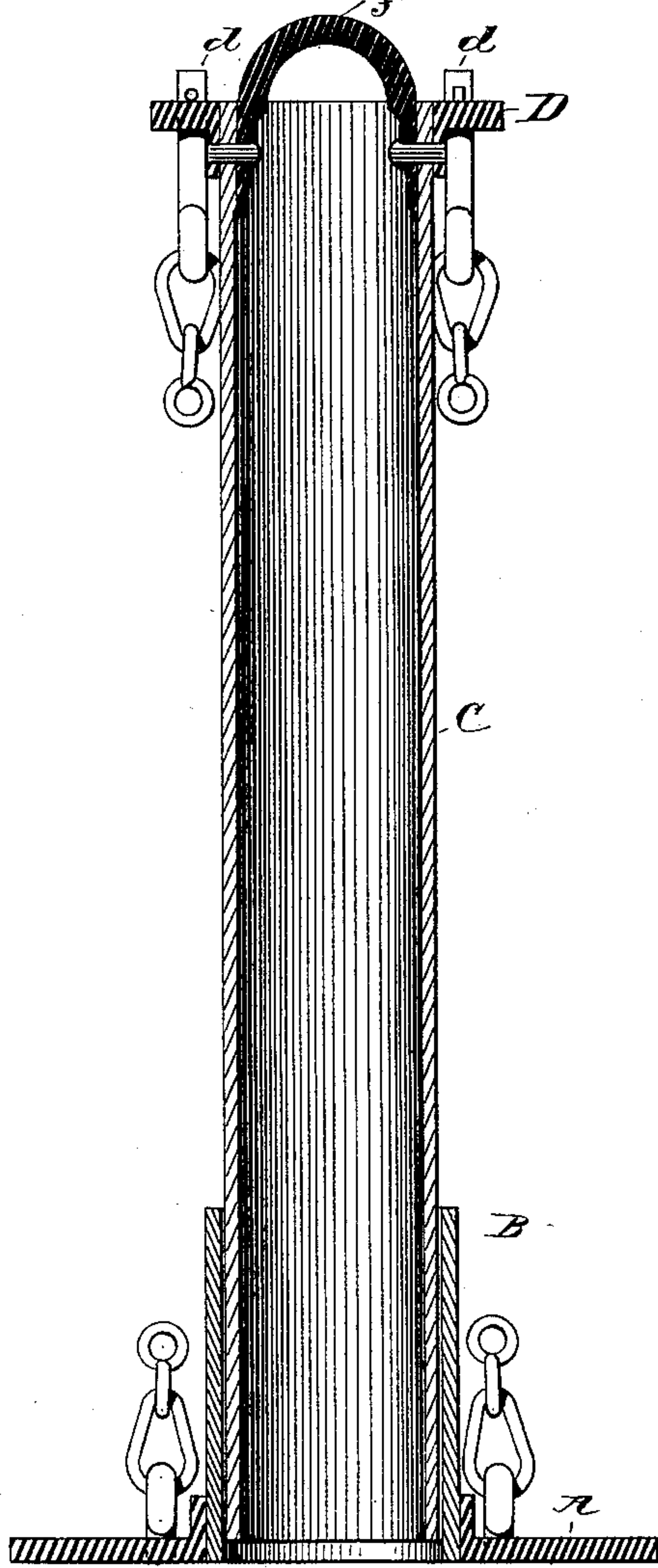


Fig. 3.

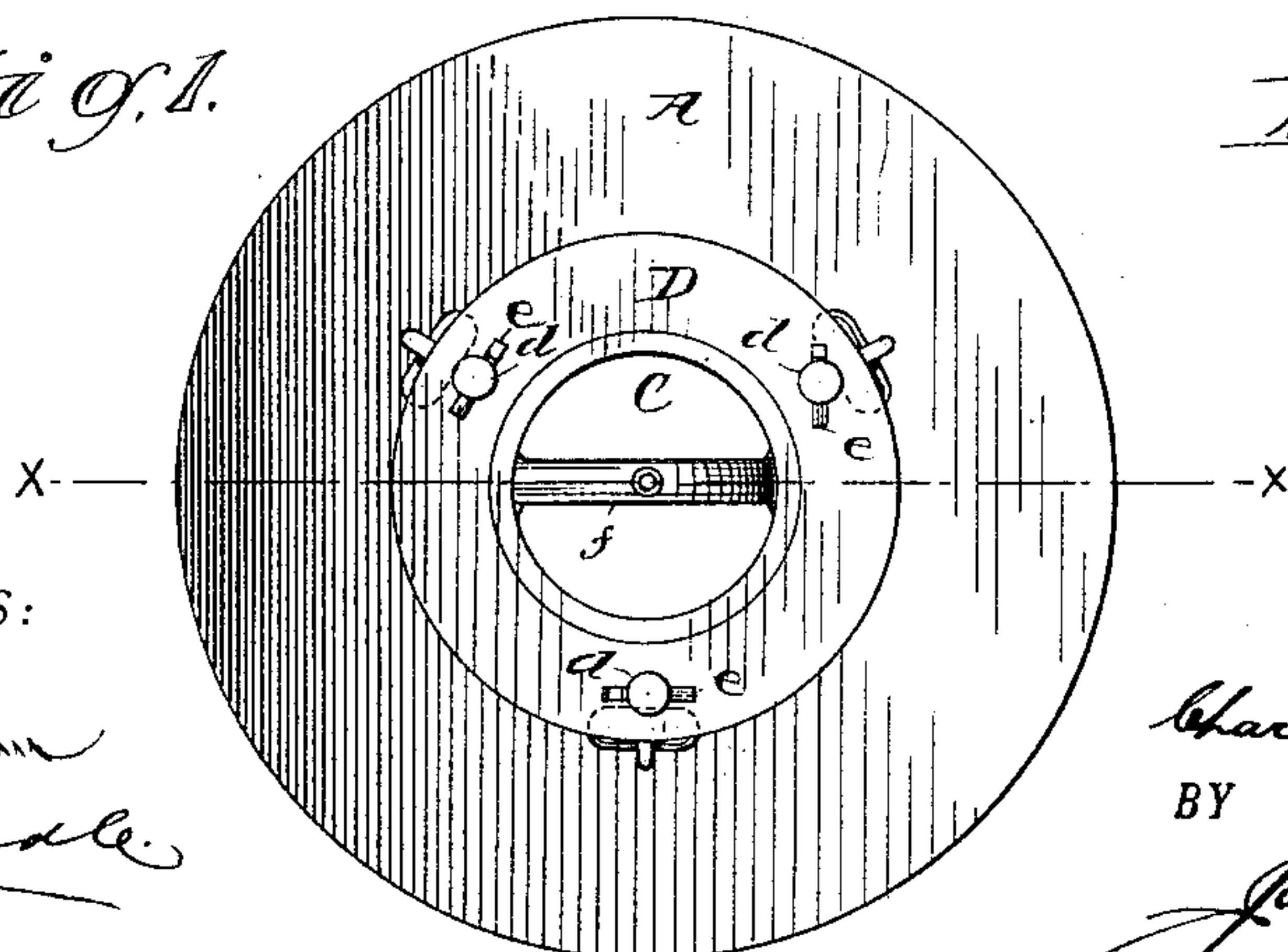


Fig. 2.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES E. MATTESON, OF ALLENTOWN, PENNSYLVANIA.

DEVICE FOR SUPPORTING WIRE DURING THE PROCESS OF ANNEALING.

SPECIFICATION forming part of Letters Patent No. 415,391, dated November 19, 1889.

Application filed March 1, 1889. Serial No. 301,636. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES E. MATTESON, of Allentown, in the county of Lehigh and State of Pennsylvania, have invented a certain new and useful Improvement in Devices for Supporting Wire During the Process of Annealing, of which the following is a specification.

The object of my invention is to provide a device by means of which coils or bundles of wire may be easily placed into and taken out of the annealing-pot, and by which the bundles are held in place during the process of annealing away from the sides of the pot, so that the wire may be uniformly annealed; and my invention consists in the novel devices and combinations of parts hereinafter described and claimed.

In the accompanying drawings, forming a part hereof, Figure 1 is a view in elevation of my device with two of the chains broken off. Fig. 2 is a top view of my device, showing the base-plate. Fig. 3 is a sectional view in elevation, the same as in Fig. 1, taken through line *x x* in Fig. 2.

A is a base-plate, having a standard or sleeve B forming part of it.

C is a column, preferably made round and hollow, and having a flange D on its upper end. The column C is of smaller diameter than the standard or sleeve B into which it is placed, free to move up and down therein. The column C is connected with the base-plate A, preferably by chains, as shown, or other suitable connections, which permit the column to be moved relatively to the base. The chains are securely fastened to the base-plate A on their lower ends, but are removably connected with the flange D on the column C at their upper ends, and for this purpose I have shown and described the chains terminating at their upper ends in pins *d*, which pass through holes in flange D, and are kept in place and prevented from falling out by pins or keys *e*; but I do not mean to limit myself to the means shown, since any other suitable device that will accomplish the desired result may be employed. A hook or ring *f* is secured to the upper end of the column C, to which a crane or other lifting device may be connected, so that the whole de-

vice may be moved about and placed within and taken out of the annealing-pot.

The purpose and operation of this device in the process of annealing wire are as follows: The base-plate and standard or sleeve connected therewith is set on a suitable floor. The supporting-column C is placed in the standard or sleeve B. The chains secured to the base are then connected with the upper flange D of the column C, in the manner above described. Coils of wire are then placed over this column outside of the chains and a crane or other suitable lifting device is then fastened to the hook *f*, and the whole device and the coils of wire are then lifted from the floor and lowered into the annealing-pot and the crane disconnected; or, as will be readily understood, the device may first be lowered into the annealing-pot and afterward the coils or bundles of wire placed or dropped over the column while it is in the annealing-pot. The wire is of course coiled in bundles of such diameter or size as will fit loosely over the supporting-column and the surrounding chains. Thus it will be seen that the column and the chains support the coils of wire in an upright position during the annealing, and the coils of wire do not touch the sides of the pot, and the whole of each bundle is therefore subjected to the same degree of heat for the same length of time. After the wire has been sufficiently annealed the crane or other lifting device is again connected with the hook *f* of the support, and the whole device and the wire around it is lifted out of the pot and placed on the floor to cool. The keys for holding the loose pins of the chains to the flange on the upper end of the supporting-column are then removed and the supporting-column lifted out by the crane or other lifting device and the chains drop within the coils and standard or sleeve to the bottom, leaving the coils standing on the base A, from which they can be removed for cleaning and galvanizing.

What I claim as my invention is—

1. A device for supporting wire during the process of annealing, which consists of a metal base and a solid or hollow column which passes loosely through said base, and which column is removably connected at one end



with said base by means which permit it to be moved relatively to said base, and around or over which column the coils or bundles of wire are placed ready to be annealed, substantially as set forth.

2. A device for supporting wire during the process of annealing, which consists of a metal base, a standard or sleeve projecting up from said base and forming part thereof, and a solid or hollow column which sets in said standard or sleeve and passes loosely there-  
10 through, and which column is removably connected at one end with said base by means which permit it to be moved relatively to said  
15 base, and around or over which column the coils or bundles of wire are placed ready to be annealed, substantially as set forth.

3. A device for supporting wire during the process of annealing, which consists of a metal  
20 base, a sleeve or standard projecting up from said base and forming part thereof, a solid or hollow column which sets in said sleeve or standard and passes loosely therethrough, and which is removably connected at one end  
25 with said base by chains or other suitable connections which permit the said column to be moved relatively to said base, and around or over which column and chains or other suitable connections the coils of wire  
30 are placed ready to be annealed, substantially as set forth.

4. A device for supporting wire during the process of annealing, which consists of a metal  
35 base, a sleeve or standard projecting up from said base and forming part thereof, a solid or hollow column which sets in said sleeve or standard and passes loosely therethrough, and which is removably connected at one end with

said base by chains or other suitable connections which permit the said column to be  
40 moved relatively to said base, one end of which chains or other suitable connections being immovably connected with said base and the other ends removably connected with the up-  
45 per end of said column, and around or over which column and chains or other suitable connections the coils of wire are placed ready to be annealed, substantially as set forth.

5. A device for supporting wire during the process of annealing, which consists of a metal  
50 base, a standard or sleeve projecting up from said base and forming part thereof, chains or other suitable connections immovably attached at one end to said base, the other ends of said chains terminating in pins having holes  
55 therethrough, a solid or hollow column which sets in said sleeve or standard and passes loosely therethrough, and which has a flange on its upper end with holes in it, through which the pins on the upper ends of the chains pass,  
60 and keys or pins which pass through the pins of the chains to prevent them from falling out of the holes in the flange, thus removably connecting the supporting-column to the base,  
65 around or over which column and connecting-chains the coils of wire are placed ready to be annealed, and a hook or the like attached to the upper end of said column, to which a crane or other lifting device may be connected,  
70 substantially as and for the purpose set forth.

This specification signed this 18th day of February, A. D. 1889.

CHARLES E. MATTESON.

In presence of—

GEO. H. SONNEBORN,  
A. W. KIDDLE.