

# O. F. Fitch, Carding Machine.

N<sup>o</sup> 62,830.

Patented Mar. 12, 1867.

Fig. 1.

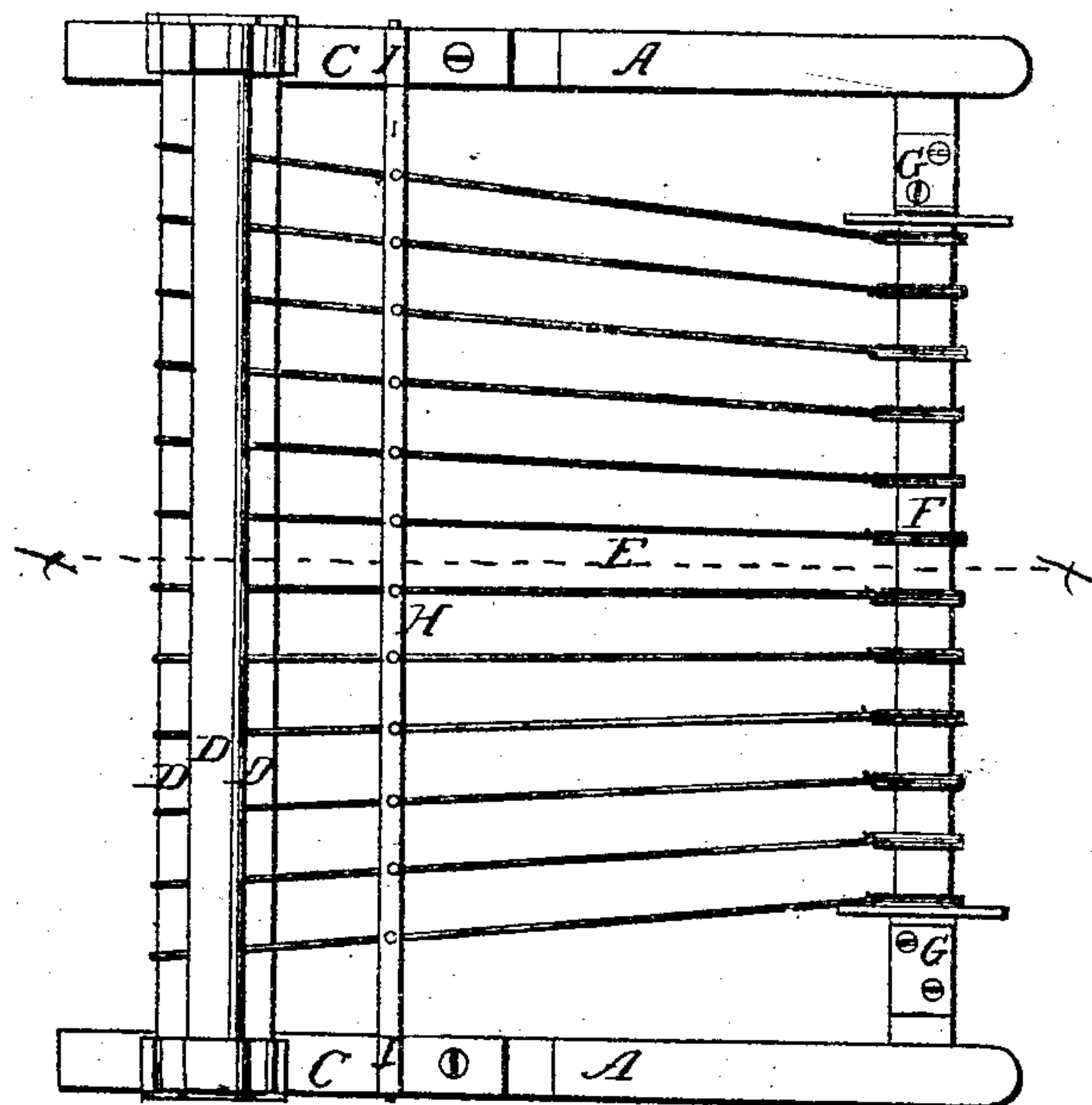
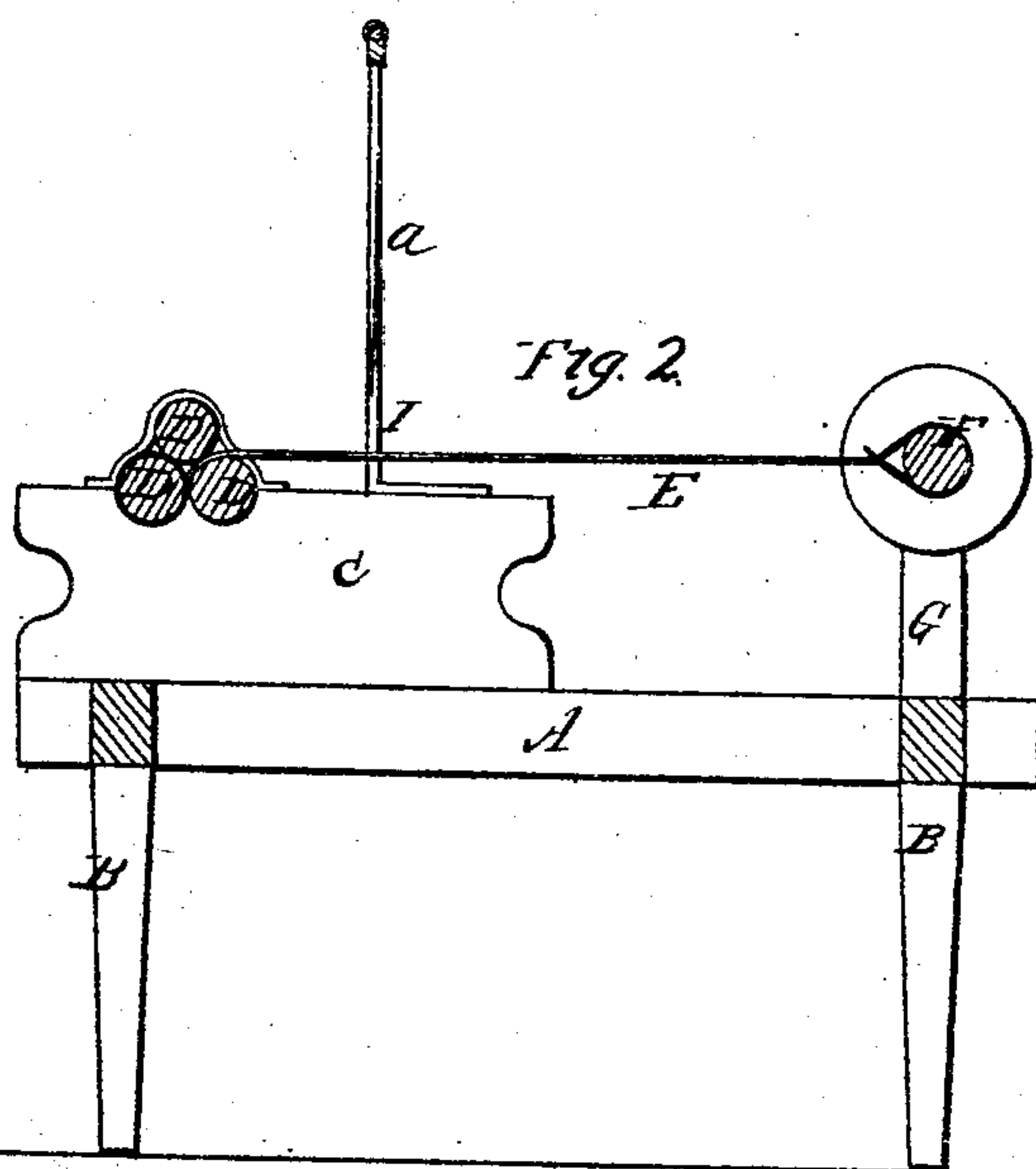


Fig. 2.



WITNESSES:

E. Jackson  
J. A. Swine

INVENTOR.

O. F. Fitch  
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# United States Patent Office.

O. F. FITCH, OF MORRISTOWN, INDIANA.

*Letters Patent No. 62,830, dated March 12, 1867.*

## IMPROVEMENT IN CARDING ENGINES.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, O. F. FITCH, of Morristown, in the county of Shelby, and State of Indiana, have invented a new and useful Improvement in Carding Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

The nature of this invention consists in the construction and employment of a device and attached to a wool-carding machine in such a manner as to draw the electricity from the wool by means of conductors employed in close proximity to the roping. Wool being an electric, and consequently a non-conductor, it follows that a sufficient friction is produced by the condensing rollers upon the roping as it passes between them, (when the state of the atmosphere is favorable) to disturb the electric equilibrium and the various strands or threads of roping being in the same electrical state, strongly repel each other or are attracted by some parts of the machine, so that they often break or become so attenuated and irregular in size as to be unfit for spinning. Again, it is a fact well known to the electrician, that electricity is readily received upon sharp points of steel by induction, even at some distance from the electrified body. It is upon this principle my invention is constructed. These points do not approach to within an inch of the roping, and yet the electricity is carried away so that no evidence of its presence can be seen when the points are in position. It is, however, essential, that they should be connected to the framework by a good conductor, and presented toward the roping. They may be placed above or below the roping. The efficacy and utility of my invention are easily tested: When there seems to be an abundance of electricity in the air, by turning the points away from the roping the effects will be readily seen: the roping will immediately begin to yield to the repulsion of the electric fluid, but the instant the points are again brought into position, the equilibrium is restored. By my invention this difficulty, heretofore encountered, is fully obviated.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a top plan view of my improvement.

Figure 2 is a cross-section of the same from the line *x x*.

Letters of like name and kind refer to like parts in each of the figures.

A represents a rectangular frame made of wood, mounted and supported on four posts B B B B. Upon the said frame A are blocks C C, that are secured to the said frame, and in which run the condensing rollers D D D. E represents the roping that passes from the condensers on to the spool F. The spool has bearings, and runs in two upright standards, G G, located and secured upon an end of the frame A. H is a shaft provided with journals that have bearing in the uprights I I. These uprights are secured to the blocks C C. The said shaft H is made of metal that is a good conductor of electricity, and is provided with steel pendent points, *a*, that come in close proximity with the roping, and conduct the electricity from the wool, thus obviating the difficulty heretofore encountered by the electricity in wool.

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

1. The conductor armed with slender pendent points presented to the roping in rear of the condensing rollers, as herein shown and described as and for the purpose specified.
2. The shaft H, uprights I I, and pendent points *a*, in combination with the condensing rollers D D D, spool F, and frame A, when constructed and arranged as herein set forth and for the purpose specified.

O. F. FITCH.

Witnesses:

J. G. WOLF,

D. S. McGAUGHEY.