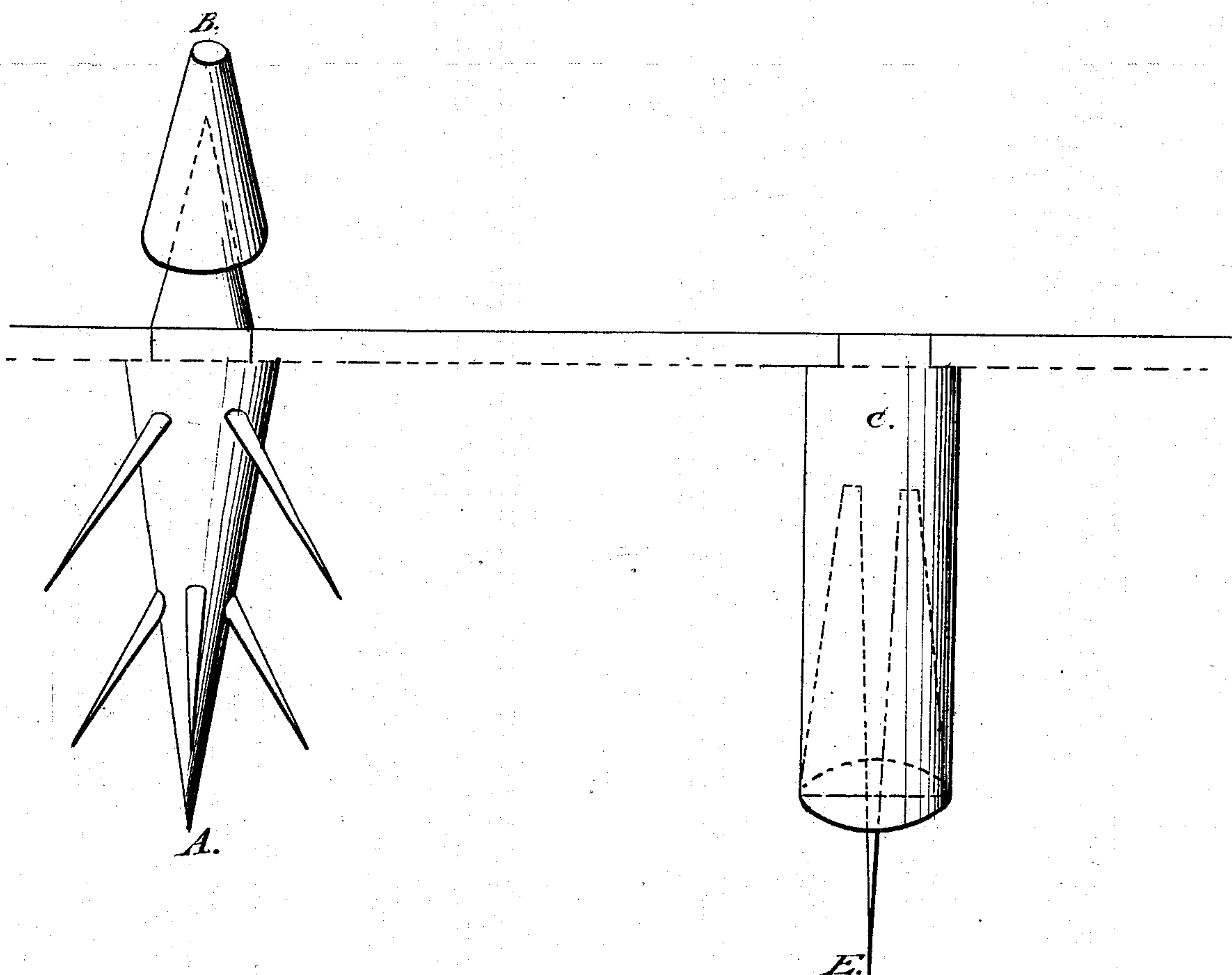


J. L. HUSBAND.
PREVENTING INCRUSTATION OF STEAM BOILERS.

No. 69,096.

Patented Sept. 24, 1867.



Witnesses:

Jno L. Husband.
W. Morris Husband.

Inventor:

J L Husband.

United States Patent Office.

I. L. HUSBAND, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 69,096, dated September 24, 1867.

IMPROVEMENT IN PREVENTING INCRUSTATION OF STEAM BOILERS.

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, I. L. HUSBAND, of the city of Philadelphia, State of Pennsylvania, have invented a new and improved Mode of Preventing Scale or Incrustations in Steam Boilers, and for removing the same when formed; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The letter A represents an absorbing or magnetic point with several smaller points affixed thereto. The base of this point must pass through the boiler-shell to a point on the outside thereof, upon which point is to be placed a movable cap made of insulating material, glass, for instance. The letter B represents the said cap affixed upon the base point of A. The letter C represents a cylindrical bar, with a cylindrical hole extending nearly through, into the top of which is affixed in an ordinary way an absorbing or magnetic rod, pointed, extending one inch, for instance, beyond the open end of the bar C, as indicated by the letter E.

The nature of my invention consists in affixing absorbing or magnetic points into the shell of the boiler in the steam space, for instance, one or more of which must extend through the boiler-shell to the outside thereof, terminating to a point, upon which will be placed a movable insulated cap to be removed when the boiler is free from scale or incrustations, so as to allow an escape of the surplus electrical fluid.

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

The points are made of iron, for instance. Before affixing them in the boiler I bring them to a red heat, in a charcoal fire, for instance; then cool them in exhausted receiver or vessel, stone jar, for instance, so as to make them as susceptible as possible, after which they may be magnetized or polarized. The points may be of any desirable length and thickness at the base; so, also, the bars. The capped point should be placed over the fire-space, the bar at some forty inches from the capped point. Points and bars may be of any shape.

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

The affixing absorbing or magnetic points and bars into and through the boiler-shells, with insulated cap, all as hereinbefore described and substantially set forth.

I. L. HUSBAND.

Witnesses:

JNO. L. HUSBAND,

H. MORRIS HUSBAND.