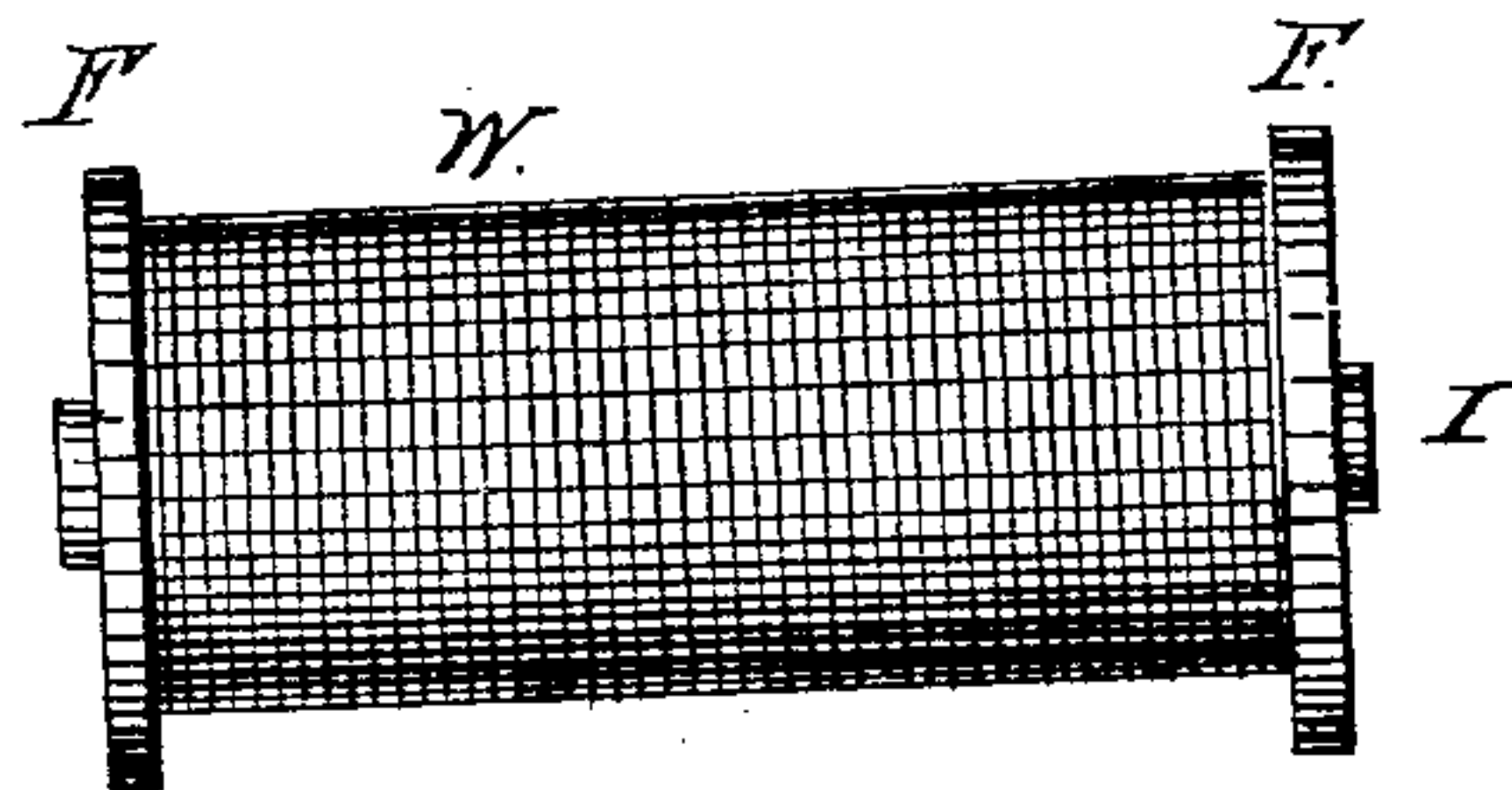


SPLITDORF & CLARK.

Electro Magnet.

No. 58,217.

Patented Sept. 25, 1866.



Witnesses
Louis Durke
John Schiltz

Inventors,
Henry Splitdorf
James J. Clark

UNITED STATES PATENT OFFICE.

JAMES J. CLARK, OF EAST CHESTER, AND HENRY SPLITDORF, OF NEW YORK, N. Y.

IMPROVEMENT IN INSULATING WIRES OF HELICES.

Specification forming part of Letters Patent No. 58,217, dated September 25, 1866.

To all whom it may concern:

Be it known that we, JAMES J. CLARK, of the town of East Chester, county of Westchester, and State of New York, and HENRY SPLITDORF, of the city of New York and State of New York, have invented a new and useful Improvement in the Construction of Helices for Electro-Magnetic and Magneto-Electric Machines; and we do declare the following to be a full, clear, and exact description thereof, reference being had to the annexed drawing and the letters of reference marked thereon.

The drawing represents one helix of a telegraphic magnet, to be used in the main circuit. I represents the iron core, F F the flanges, and W the insulated wire.

Heretofore the wire used in the construction of electro-magnetic and magneto-electric machines has been insulated with silk, cotton, or rubber. This insulation is very expensive, and the silk consumes considerable space in the helix.

Our improvement consists in making helices of electro-magnetic and magneto-electric machines of wire previously insulated with any sticky fluid dried on the wire.

To prevent the wire sticking together, and in order to more fully insulate it, the wire is passed through any powdered insulating material—such as powdered glass, stone, sand, or paper-pulp—before the sticky fluid is entirely dry, and so receive a slight coating of the powdered material.

By this means we can get any desired thickness of insulation, and costing much less than when insulated with silk, cotton, or rubber.

Having described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

Making helices for electro-magnetic and magneto-electric machines from wire insulated by passing it through any powdered material, such as powdered glass, stone, sand, or paper-pulp, after the wire has been passed through any sticky fluid, and before the sticky fluid becomes dry, as hereinbefore described.

JAMES J. CLARK.
HENRY SPLITDORF.

Witnesses:

LOUIS DIERKE,
JOHN SCHÜLTZ.