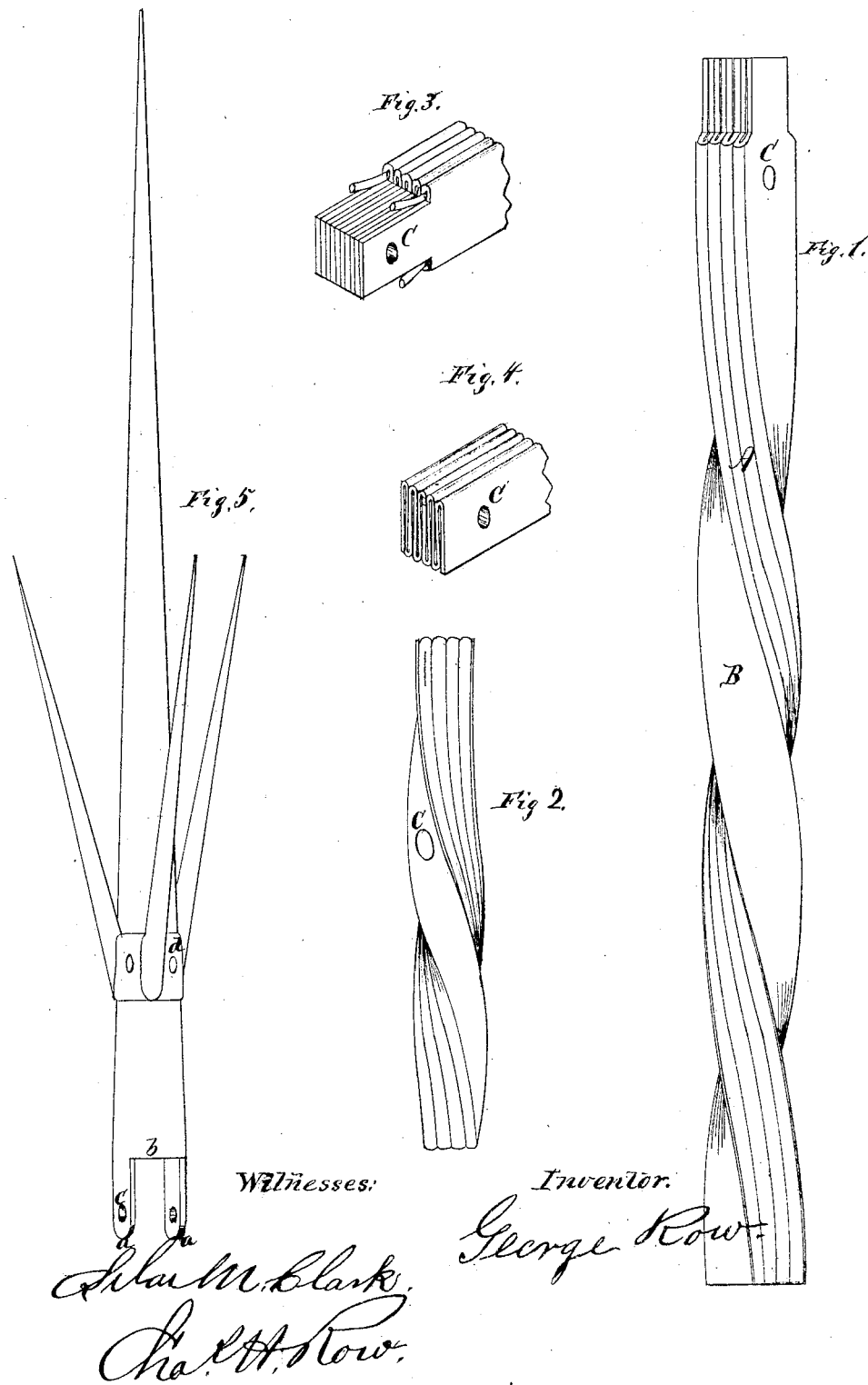


G. ROW.
Lightning Rod.

No. 109,455.

Patented Nov. 22, 1870.



United States Patent Office.

GEORGE ROW, OF INDIANA, PENNSYLVANIA

Letters Patent No. 109,455, dated November 22, 1870.

IMPROVEMENT IN LIGHTNING-RODS.

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

I, GEORGE ROW, of Indiana, in the county of Indiana and State of Pennsylvania, have invented certain Improvements in Lightning-Rods, of which the following is a specification.

Nature and Objects of the Invention.

The first part of my invention relates to constructing a lightning-rod of sheet-copper of convenient size by a series of plications or inverse folds or plaits running longitudinally and lightly pressed down, leaving small vacuums or spaces intervening the folds, whereby the conduction surface of the rod is largely increased, the extent of such surface being limited only by the number and breadth of the folds. The rod is also twisted spirally, adding to its symmetry and preventing the folds being opened, thereby strengthening it. The point section, or that part which may extend above the building or other object upon which it may be erected, may be further strengthened by inserting between the outer folds or leaves as many wires as shall be necessary to insure the desired result.

The second part of my invention relates to the manner, as shown, of joining together the respective pieces or sections of rod, make as above described, said joints or connections being formed by cutting away a portion of the back of the respective folds at one end of each sectional part of the rod, separating the leaves, and creating a shoulder to meet the ends of the connecting section; then, by taking the ends of the several sections of rod thus prepared, and inserting the separated leaves or folds into the interstices of the con-

necting section, a substantial joint is effected, which is thus fully secured by a common copper rivet.

Description of Drawing.

Figure 1 represents a sectional part of the rod, showing the several folds A, the width of the folds B, and rivet-holes for fastening joints C.

Figure 2 illustrates the sections joined, the transverse line exhibiting the point of junction with the rivet-fastening C.

Figure 3 represents the head of section with the backs or folds cut down, forming a shoulder and separating the leaves.

Figure 4 illustrates the foot of section, showing spaces between folds, into which the separated leaves, as shown in fig. 3, are inserted, forming the connections between the several sections.

Claims.

I claim as my invention—

1. A lightning-rod, constructed of a series of plications or folds of metal, substantially as and for the purposes hereinbefore set forth.

2. The manner of connecting the several sectional parts, substantially as and for the purposes hereinbefore set forth.

GEORGE ROW.

Witnesses:

SELAH M. OLARK,
CHAS. H. ROW.