

(No Model.)

H. D. WELSH.
CABLE CONDUIT.

No. 322,225.

Patented July 14, 1885.

Fig. 1.

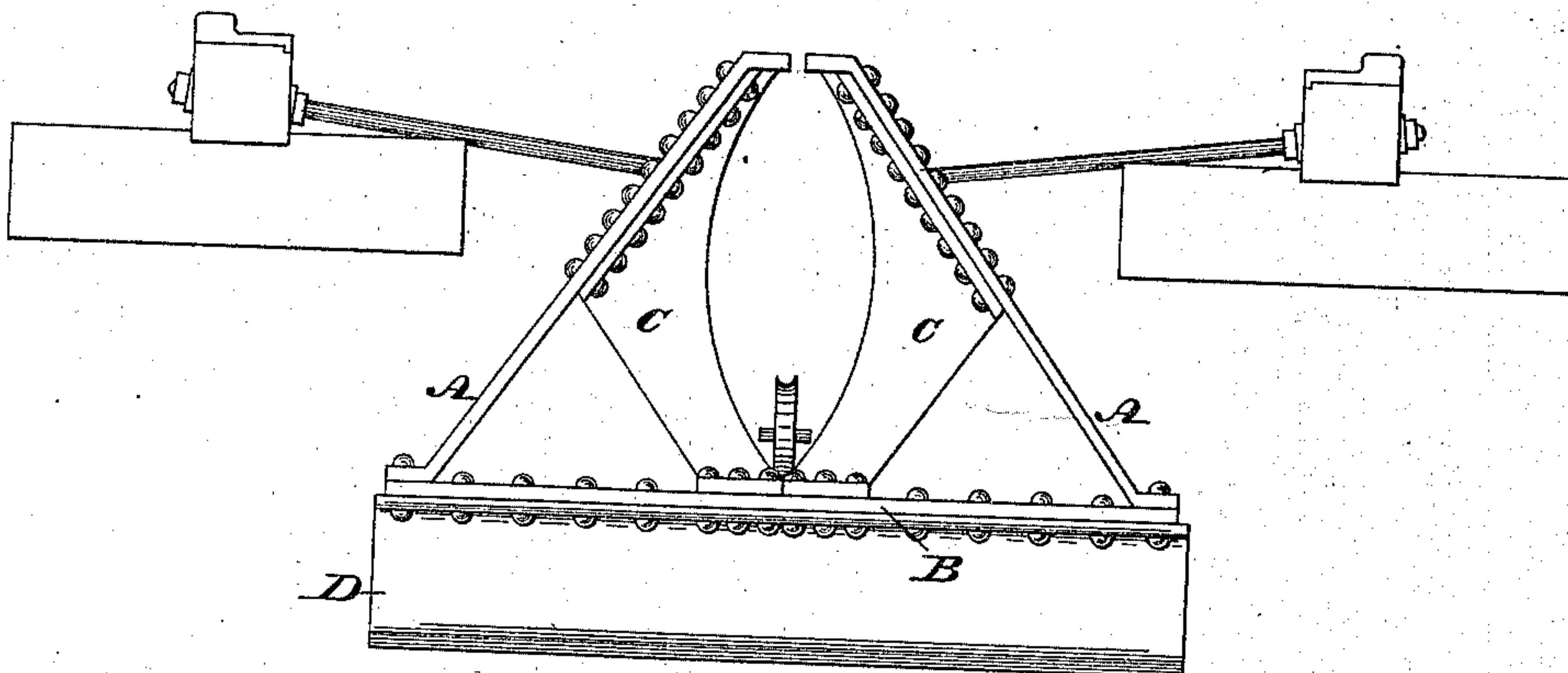
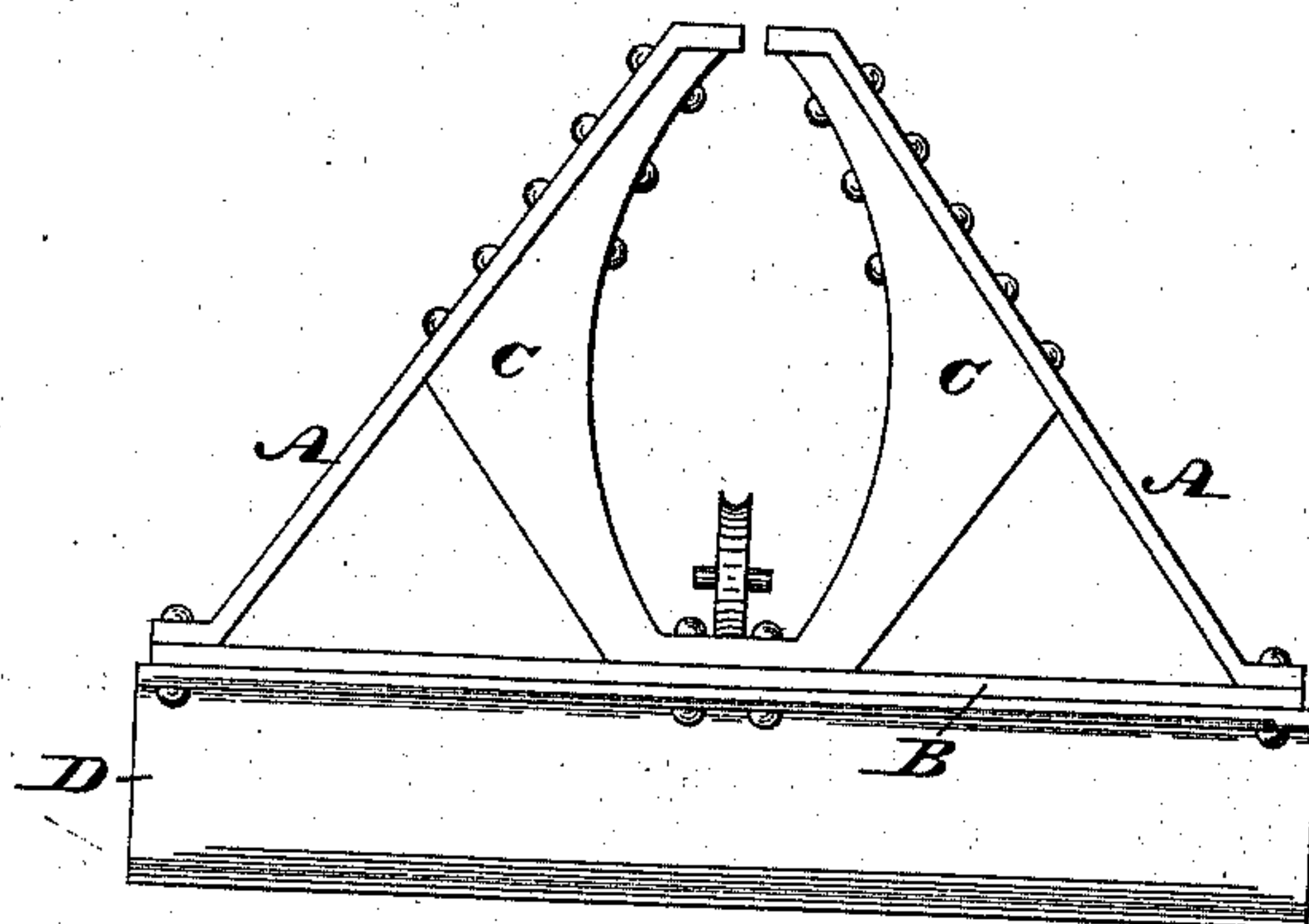


Fig. 2.



WITNESSES:

Ed. T. Grant,
W. F. Fisher

INVENTOR:

Henry D. Welsh
BY *John A. Diederichsen*
ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY D. WELSH, OF PHILADELPHIA, PENNSYLVANIA.

CABLE-CONDUIT.

SPECIFICATION forming part of Letters Patent No. 322,225, dated July 14, 1885.

Application filed May 11, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. WELSH, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Cable-Conduits, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents an end elevation of a cable-conduit embodying my invention. Fig. 2 represents an end view of a modification thereof.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in forming a cable-conduit of pyramidal form, whereby the sides of the conduit are not affected by the pressure of the ground when expanded by frost.

It further consists of inside bracings, which strengthen the conduit, as will be hereinafter set forth.

Referring to the drawings, A represents the sides of a cable-conduit, and B the bottom thereof. The shape of the conduit in cross-section is that of a pyramid, the effect of which is to prevent the pressure of the ground, when expanding by frost, from forcing in said sides, and thereby closing the slot, it being evident that the sides of the conduit permit an upward action of the ground by affording an oblique resistance to the pressure thereof.

C represents a brace formed of two pieces, which in Fig. 1 are flanged at their upper and lower ends, the upper flanges conforming to the diagonal sides of the conduit and the lower flanges with the floor thereof, the upper flanges being riveted to said sides and the lower flanges to said floor; and the floor is furthermore riveted to the flanges of angle or

channel irons or bearings D, the latter being placed at the bottom of the trench within which the conduit is laid. The upper ends of the braces support the slot-irons, and thus, in connection with the sides and bottom parts, strengthen the conduit and cause it to endure the strain to which it may be subjected.

In Fig. 2 the flanges of the brace are dispensed with, and the brace is made in one piece, the rivets passing through the sides and bottom of the conduit directly through the sides and bottom of the brace. The rivets which connect the braces with the floor of the conduit also pass through the flanges of the irons or beams D, thus increasing the strength of the brace with the floor.

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

1. A conduit constructed in pyramidal form, of sides A, and bottom B, substantially as and for the purpose set forth.

2. A conduit having braces which are connected with the sides and bottom of the conduit, substantially as and for the purpose set forth.

3. A conduit having braces which are connected at the sides and bottom of the conduit and sustain the slot-irons, substantially as and for the purpose set forth.

4. A conduit formed of sides A, bottom B, braces C, and irons or beams D, all constructed and operating substantially as and for the purpose set forth.

HENRY D. WELSH.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.