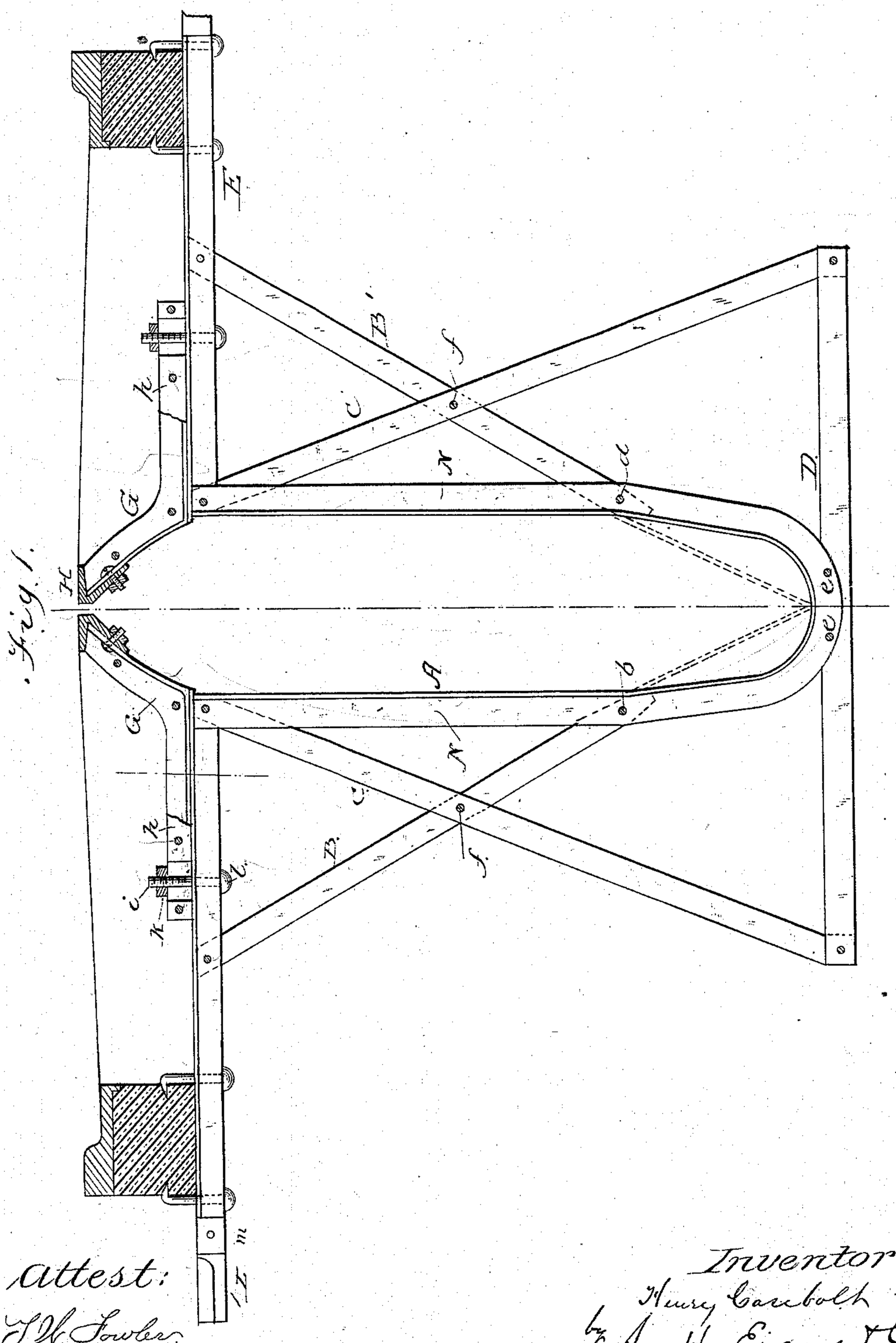
(No Model.)

2 Sheets—Sheet 1.

H. CASEBOLT.

CABLE WAY.

No. 249,300. Patented Nov. 8, 1881.



Attest:
J. W. Fowler
R. K Evans

Inventor;
Henry Casebolt
by A. H. Evans & Co
his attys

(No Model.)

2 Sheets—Sheet 2.

H. CASEBOLT.

CABLE WAY.

No. 249,300. Patented Nov. 8, 1881.

Fig. 3.

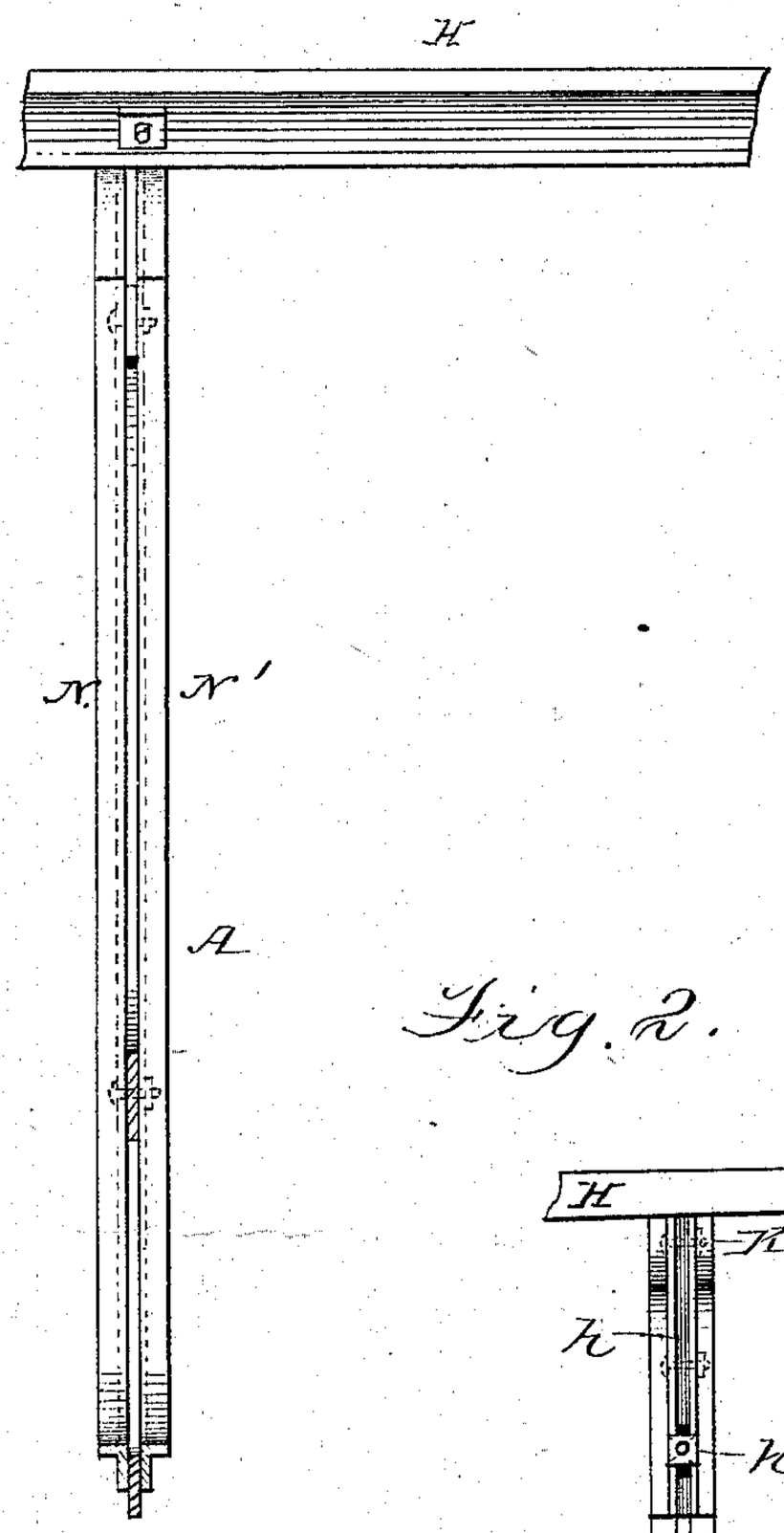


Fig. 2.

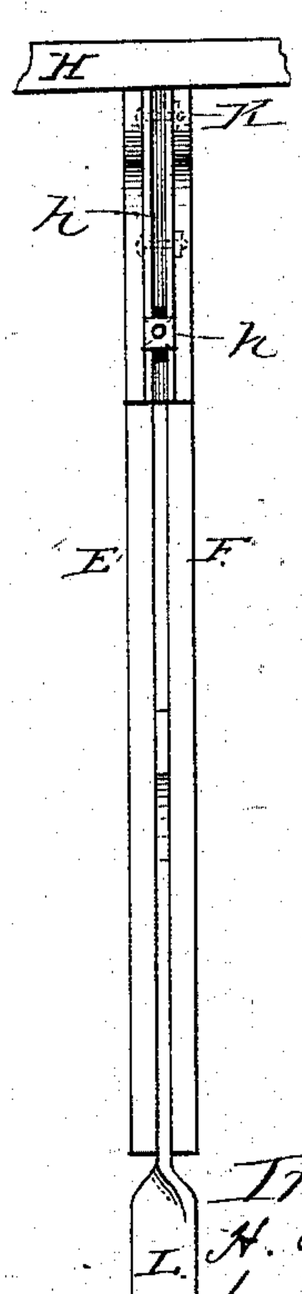
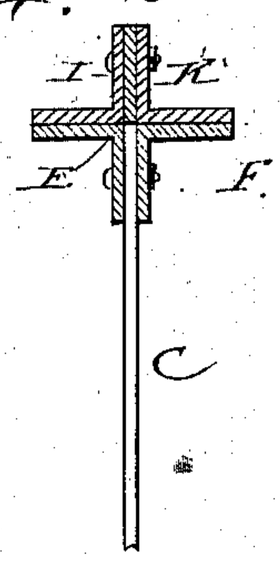


Fig. 4.



Attest:

D. F. Fowler.

R. X. Evans

Inventor;
H. Casebolt
by
A. H. Evans & Co
Attys

UNITED STATES PATENT OFFICE.

HENRY CASEBOLT, OF SAN FRANCISCO, CALIFORNIA.

CABLE-WAY.

SPECIFICATION forming part of Letters Patent No. 249,300, dated November 8, 1881.

Application filed September 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, HENRY CASEBOLT, of the city of San Francisco and State of California, have invented a new and Improved Tunnel-Frame for the Construction of Cable-Ways; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of the frame. Fig. 2 is a plan of the same. Figs. 3 and 4 are details to be referred to.

The object of my invention is to provide a cheap and substantial yoke and frame-work for the tunnel and track of underground cable-roads; and my invention consists in certain details of construction and combinations of angle-iron and flat iron bars, as hereinafter fully described and specifically claimed.

In order that those skilled in the art may make and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, the yoke A is formed of two bars of angle-iron, N N′, having their flat faces toward the tunnel, as seen in Fig. 3, and between these two bars of angle-iron are bolted flat iron braces B, B′, C, C′, and D by means of bolts *b d e*. The base brace D serves as a steadying or foundation rest. Where the braces B B′ and C C′ cross each other they are secured by bolts *f*. The cross-braces which bind the track-timbers to the yoke are formed of two bars of angle-iron, E F, having their flat faces up, and having an intervening flat iron bar coincident in shape with an angle-iron supporting-bracket, G, for supporting the angle-iron slot-iron H.

The support for the slot-iron is made of two bars of angle-iron, I K, (seen in plan, Fig. 2,) the flat faces of the said bars lying against the upturned flat faces of the binding-bars E F, and between them is the flat iron bar *h*, which terminates at such a point as to allow the passage of bolt *i* between the angle-iron bars I K, the nut *k* resting on the supports for the slot-iron, and the head *l* resting against the downwardly-projecting ribs of the angle-iron. Between the ends of angle-iron bars E F are bolted flat bars L by means of bolts *m*, and then the said bars L are twisted (see Fig. 2) into a plane at right angles to the position of the ends, and, passing to the next track, are secured in like manner, so as to bind the double tracks securely together.

In bending the angle-iron to form the yoke the dependent web at the lower end of the bight may be cut out in a V-shaped cut, so as to prevent any possible breakage or fracture when the iron is bent.

The brace and counter-brace, made of flat bar-iron, with the ends inserted between the angle-iron bars and bolted, secure the entire frame-work so rigidly that there is perceptibly no yield or give to it whatever.

In constructing the tunnel for the cable-road the edges of the sheet-iron or other sheathing are laid against the exterior of the faces of the angle-iron yokes.

If desired, the lower portion of the tunnel may be given a decided pitch by means of a sheet-metal gutter. (Shown in dotted lines in Fig. 1.)

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

The combined truss and tunnel for underground cable-ways, consisting of the angle-iron yoke N N′, the angle-iron binding-bars E F, the angle-iron supports I K, and the flat iron truss-bars, all constructed and operated as described.

In testimony whereof I set my hand this 23d of August, A. D. 1881.

H. CASEBOLT.

Witnesses:
R. K. EVANS,
H. B. APPLEWHAITE.