

(No Model.)

F. GORMAN.

DEVICE FOR CONSTRUCTING ARCHES.

No. 375,620.

Patented Dec. 27, 1887.

Fig. 1.

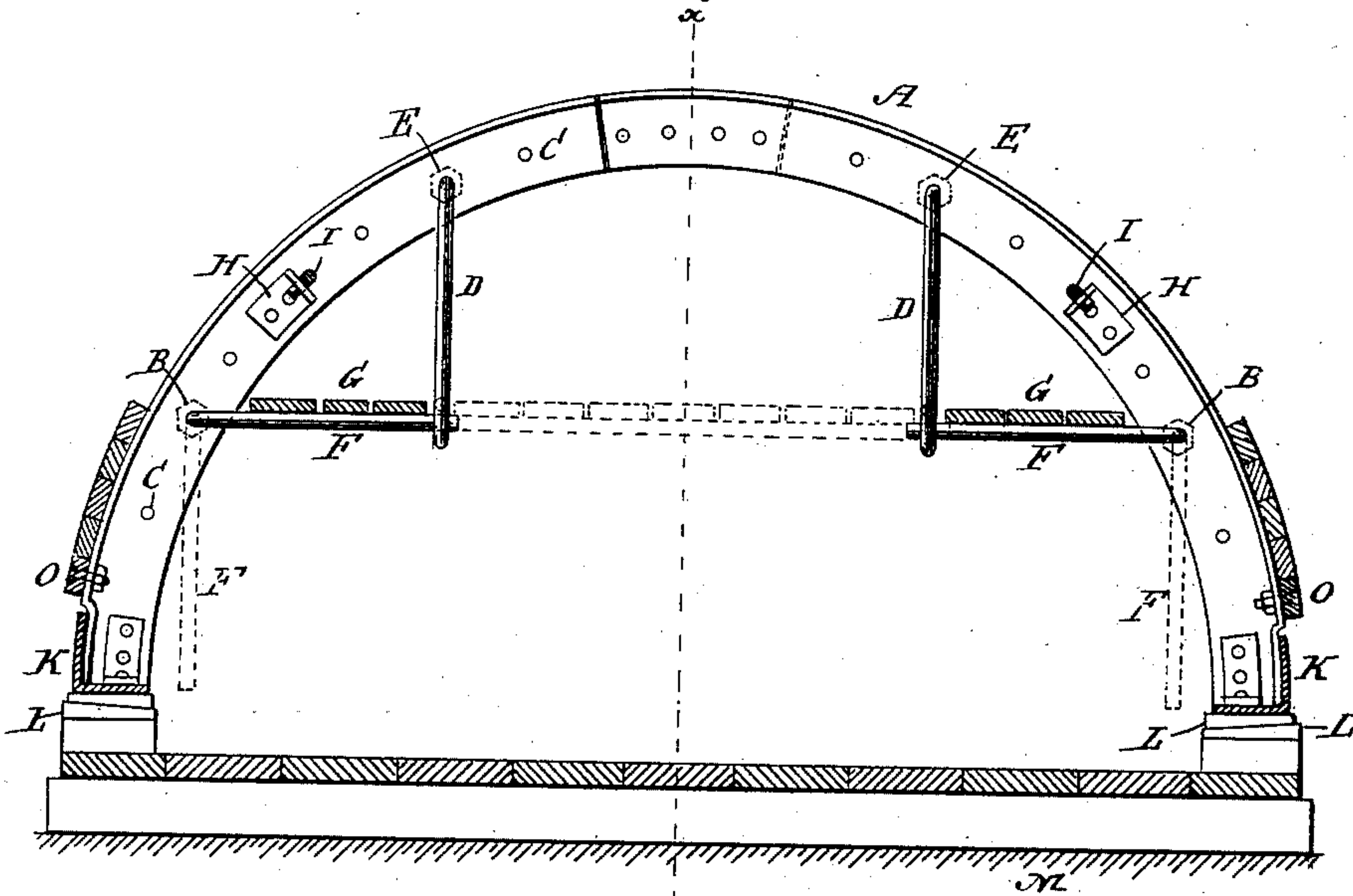
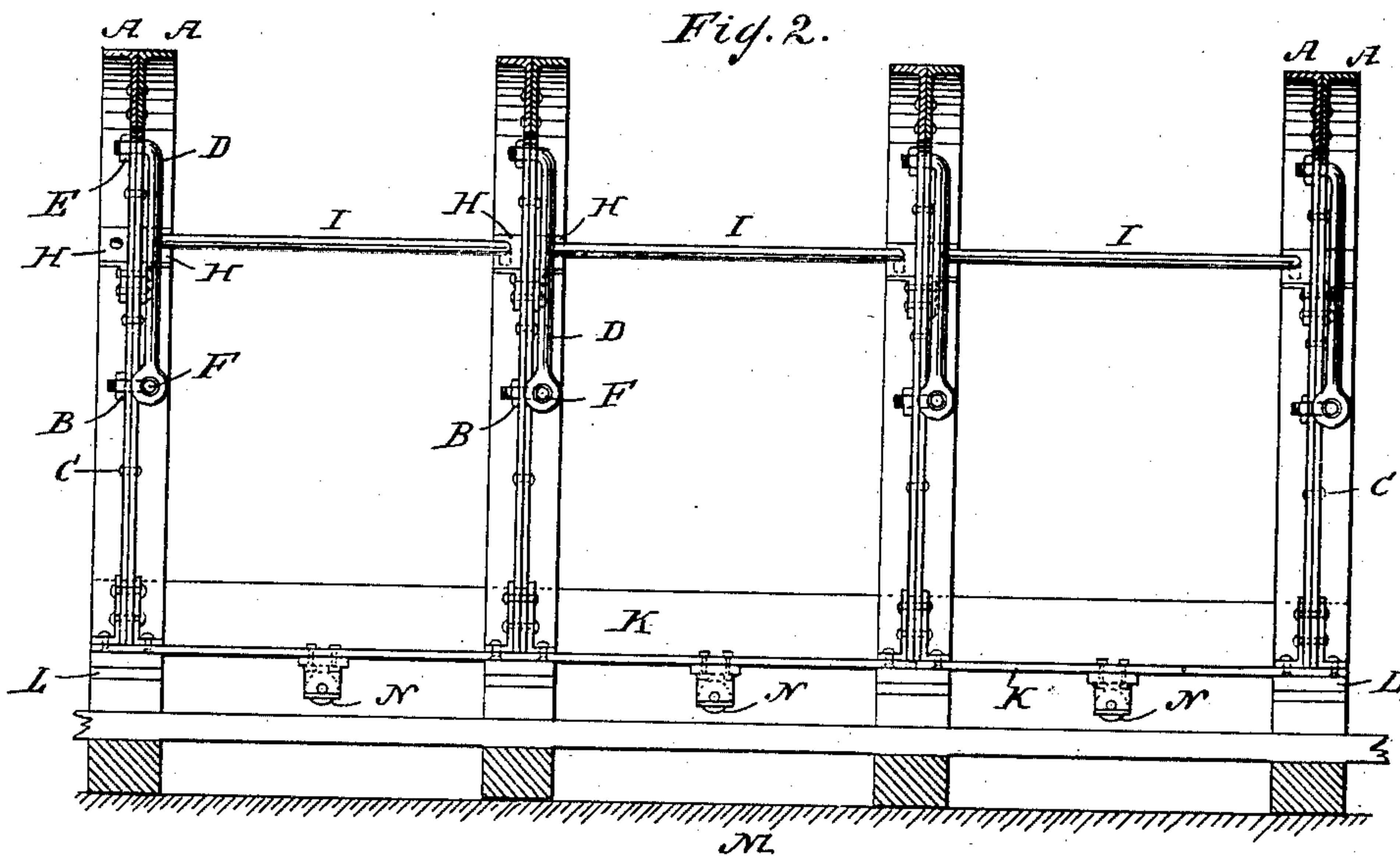


Fig. 2.



WITNESSES:

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DEVICE FOR CONSTRUCTING ARCHES.

SPECIFICATION forming part of Letters Patent No. 375,620, dated December 27, 1887.

Application filed May 14, 1887. Serial No. 238,245. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS GORMAN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Devices for Constructing Arches, of which the following is a specification.

This invention relates to devices or centers for constructing arches for vaults, tunnels, and other structures, as set forth in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is an end elevation, partly in section, of a center. Fig. 2 is a section in the plane *xx*, Fig. 1.

Similar letters indicate corresponding parts.

In the drawings, the letters A A indicate arched sections, several of which are joined to form a center. Each arched section is composed of two pieces or portions of angle-iron, which are joined by rivets C. Rods or arms D are secured in suitable eyes or engaging devices in the sections A. Bolts or nuts E prevent the rods D from coming out of place. The rods D are constructed to support rods or arms F, as seen. Said rods F are also supported in suitable eyes or engaging devices in the sections A, so that the rods F can serve as supports for rests or planks G, on which workmen can stand when they desire to work at the upper part of the sections. Bolts or nuts B can be used to hold the ends of the rods F in place in the sections A. When not in use, the rods D F can be readily dismantled or swung out of the way. Brackets H are secured to the sections A. Said brackets are adapted for the reception of connecting-rods I, by which the center sections, A, can be joined. Bases K, of angle-iron, support the sections A. Rollers N are secured to the bases K.

When it is desired to construct an arch, the center is raised above the foundation M to the proper height by wedges L. Planks or supports are then laid over the sections. Lugs O,

secured to the sections, prevent the planks from slipping down from the sections, and the broad faces formed by the angle-iron pieces composing the sections A enable the planks to gain a firm hold or rest firmly on said sections.

When the arch or vault is completed, the wedges L are removed and the center is allowed to sink down onto the rollers N. The center can then be transported or moved on said rollers to another place to construct or repair another portion of an arch or vault.

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

1. The combination, with angle-iron bases K, of arched sections A, each of said sections being composed of two 7-shaped angle-iron portions having the upright sides placed back to back and riveted together, substantially as set forth.

2. The combination, with angle-iron bases K and with arched sections A, provided with eyes or engaging devices, of supporting-rods D F, adapted to engage one another and to connect with said eyes or engaging devices of the sections A, substantially as set forth.

3. The combination, with angle-iron bases K and with arched sections A, each composed of two angle-iron portions, of brackets H, secured to said sections, and connecting-rods I, made to engage said brackets, substantially as set forth.

4. The combination, with the L-shaped bases K, of the arched sections A, each composed of an 7-shaped plate, the two being placed back to back and fastened together and the ends bolted to the outwardly-overlapping bases, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

F. GORMAN. [L. S.]

Witnesses:

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E. F. KASTENHUBER.