

May 26, 1942.

C. W. ROBERTS

2,284,302

SUPPORT FOR WIRES

Filed Oct. 4, 1940

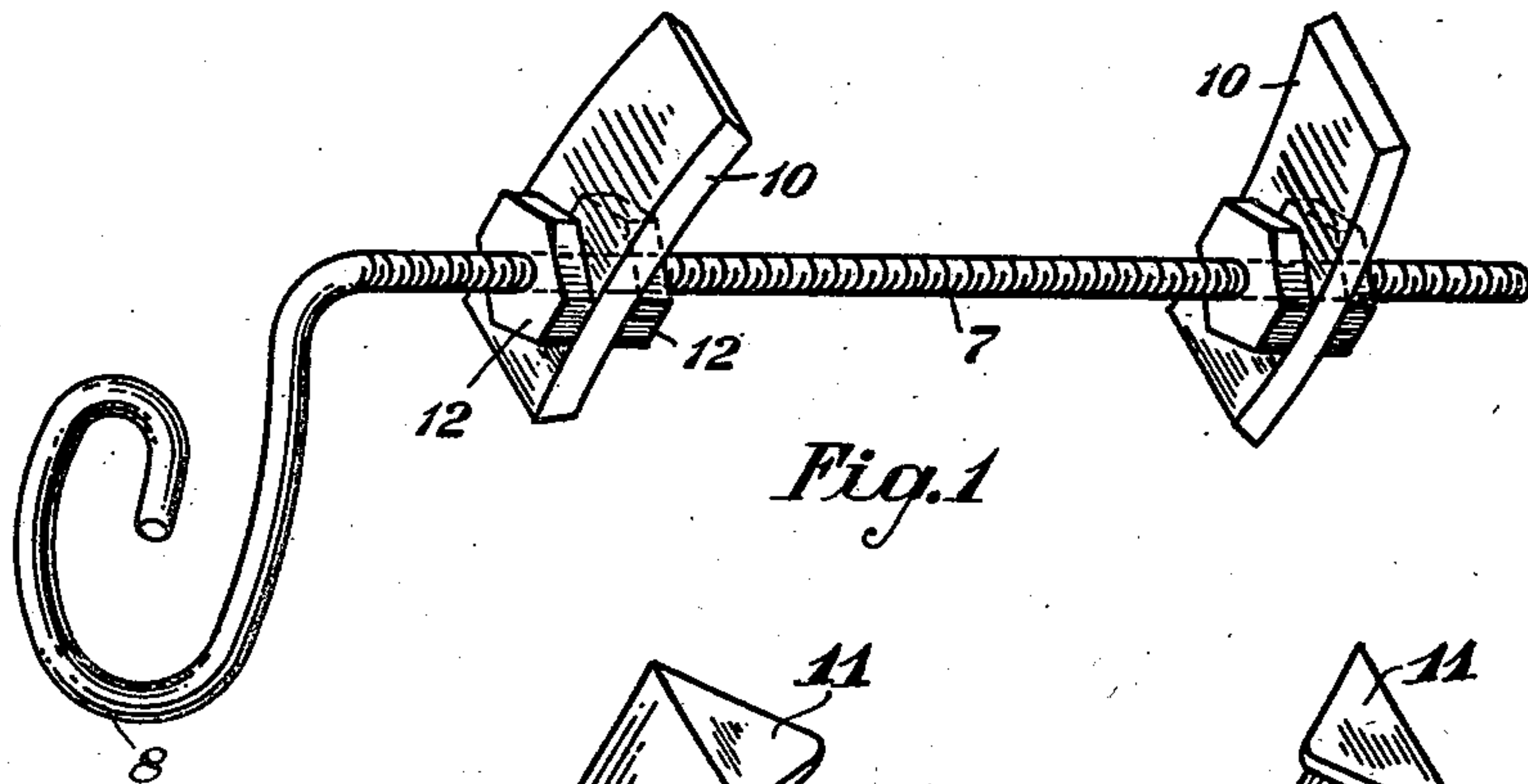


Fig. 1

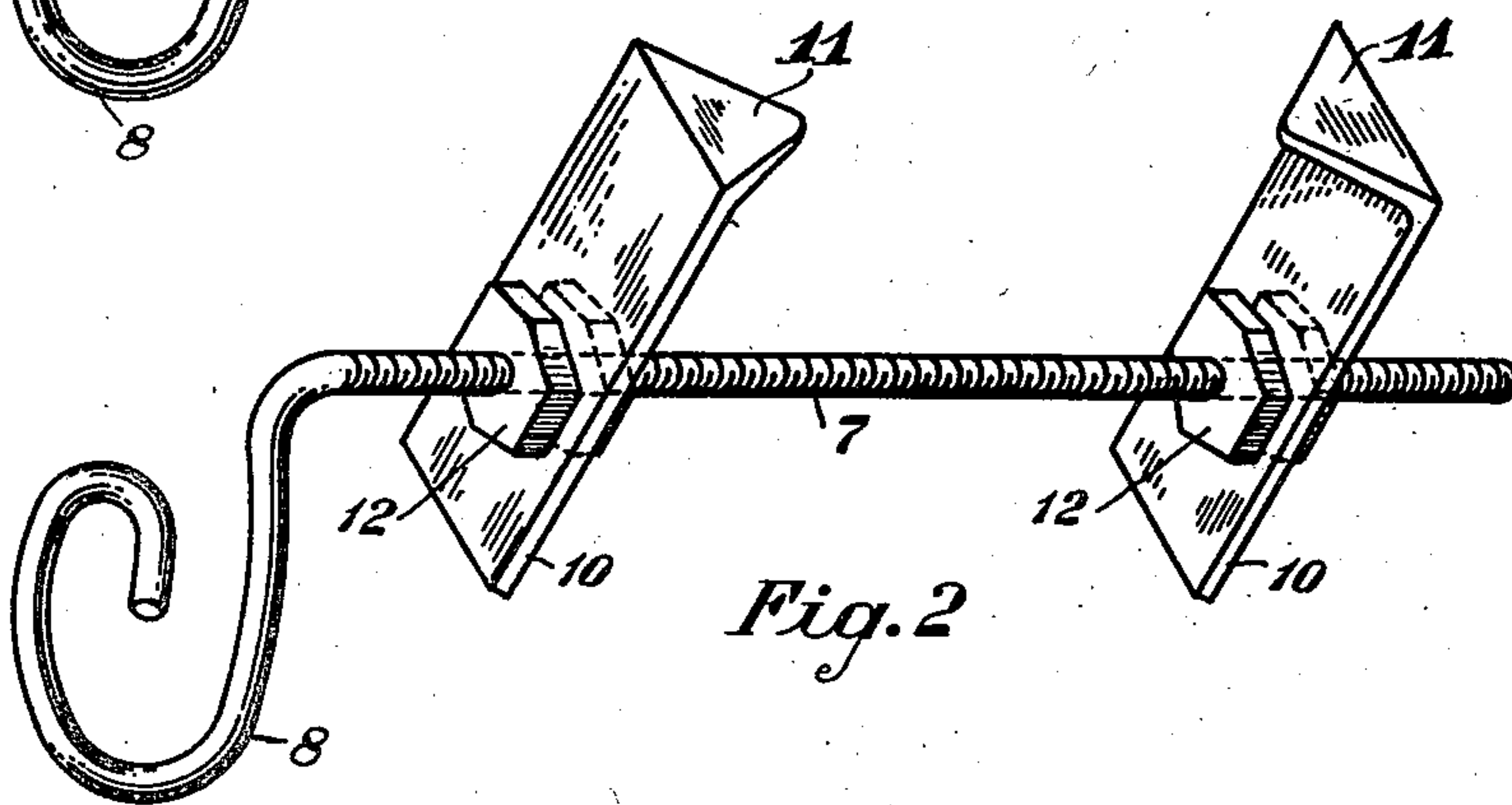


Fig. 2

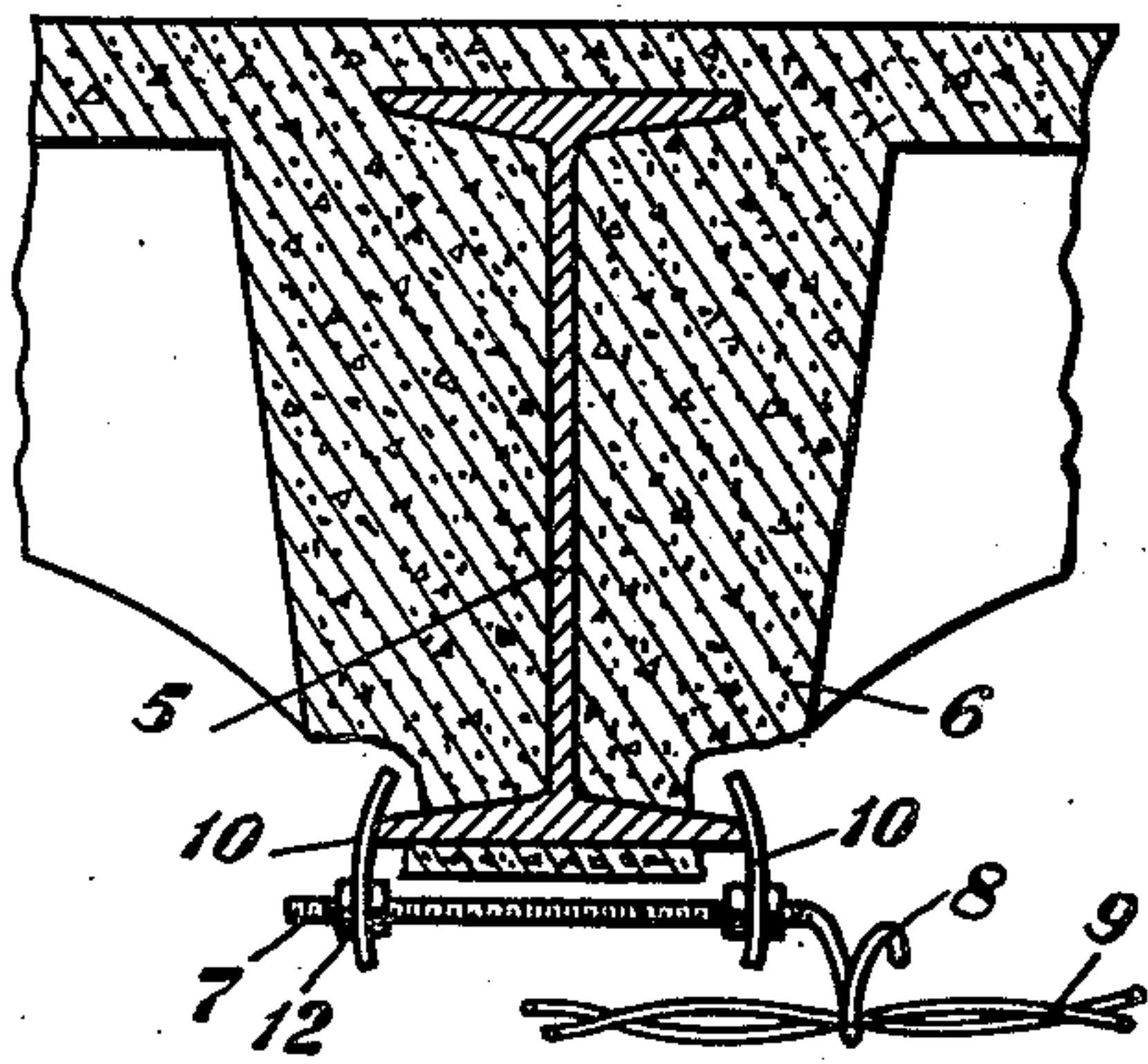


Fig. 3

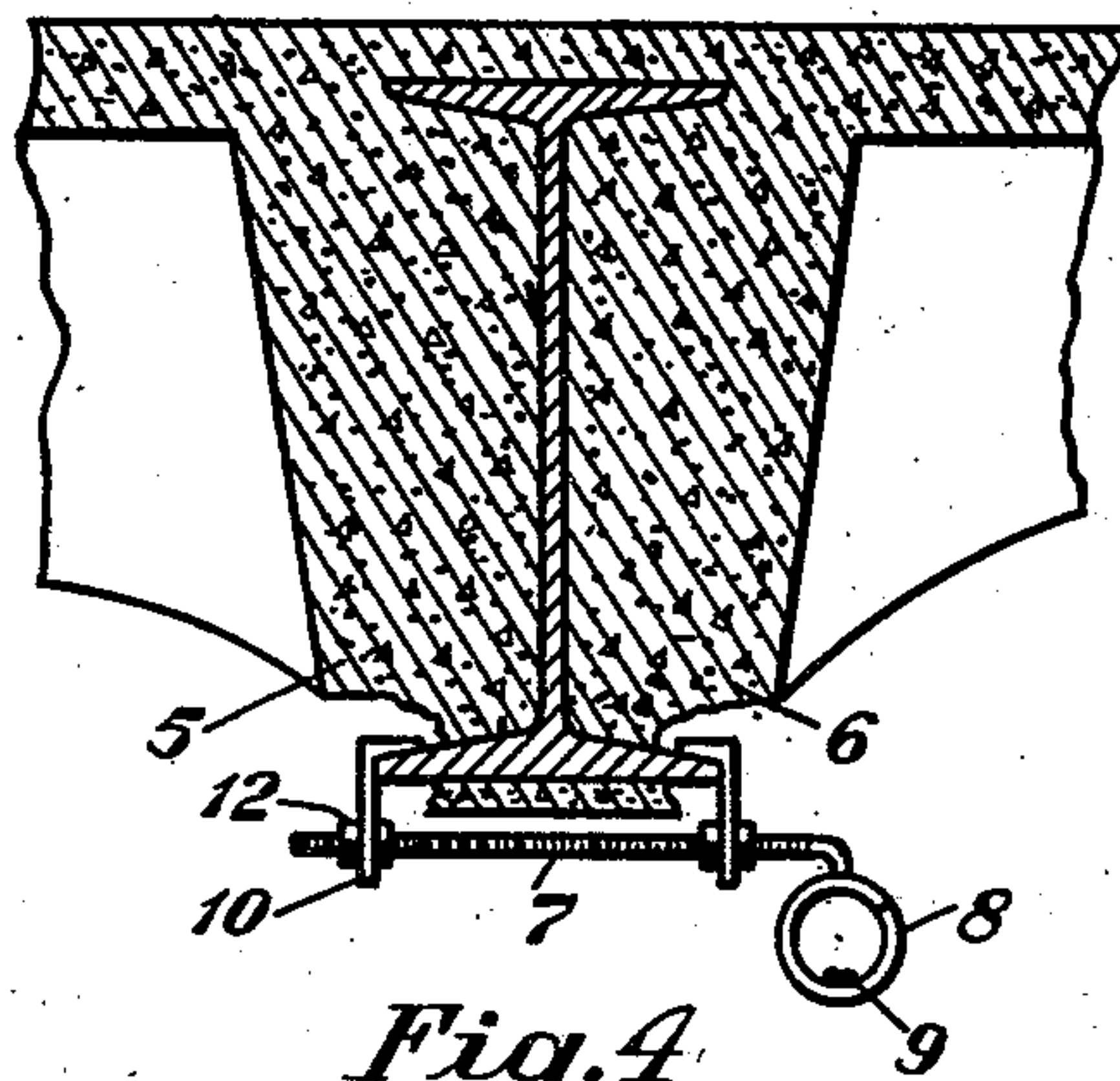


Fig. 4

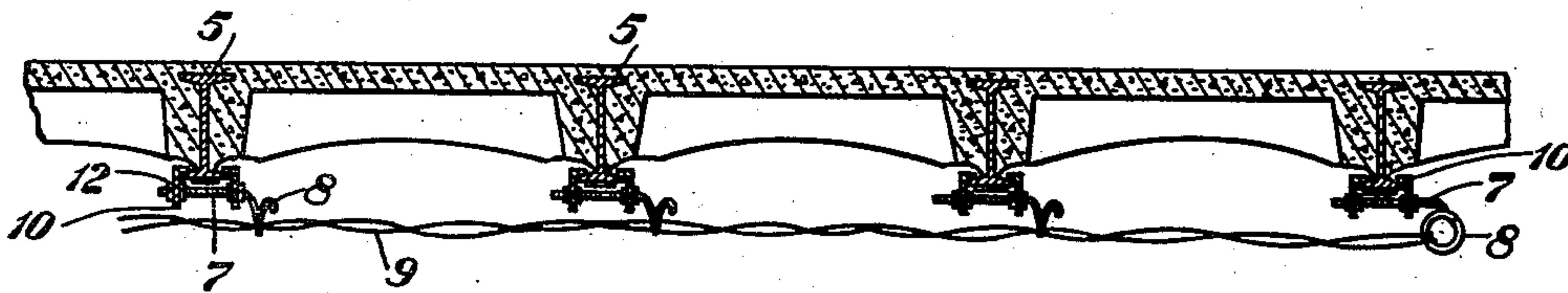


Fig. 5

INVENTOR
C. W. Roberts
BY James C. Lynch
ATTORNEY

UNITED STATES PATENT OFFICE

2,284,302

SUPPORT FOR WIRES

Charles William Roberts, Alexandria, Va., assignor to American Telephone and Telegraph Company, a corporation of New York

Application October 4, 1940, Serial No. 359,645

4 Claims. (Cl. 248—72)

This invention relates to supports for electric wire or conductor runs, and more particularly to supports of this character which may be readily attached to or detached from positions.

In connection with the construction of buildings and particularly multi-unit apartment buildings, considerable use is made of rolled steel I-beam floor joists. The steel I-beams are provided with the usual flanges, and in accordance with well-known construction, concrete arches extend between these flanges, the springing line of each arch resting on the lower flange of the beam.

It is one of the objects of this invention to provide a simple and inexpensive support which may be readily attached to or detached from the joists or I-beams used in constructions such as above outlined, so that wire or conductor runs may be introduced therethrough.

Another object of the invention is to provide a support whereby the wire runs lie closely adjacent the ceiling or the like.

These and further objects will be apparent from the following description when considered in connection with the accompanying drawing in which certain embodiments of the invention are illustrated.

Referring to the drawing,

Figure 1 illustrates one embodiment of the improved support.

Fig. 2 shows another embodiment thereof.

Fig. 3 is a sectional view of an I-beam and associated concrete work including an arch showing the improved support attached to a flange of the I-beam and with the wire runs extending through the support in a direction perpendicular to the I-beam.

Fig. 4 is a view similar to Fig. 3 but having the bridle ring portion of the support turned so that the wire runs lie in a position parallel to the I-beam, and

Fig. 5 is a sectional view showing a series of I-beams and associated arches with bridle ring portions of certain of the supports lying in a position so that the wire runs extend in a direction perpendicular to the I-beams, the bridle ring portion of a terminating support being turned so that the wire runs extend in a parallel direction to the I-beams.

In the drawing I-beams 5 which provide floor joists are shown as lying in concrete formed into arches 6 extending between the I-beams. The lower edges of the flanges of the I-beams extend beyond the concrete; or the concrete may be removed therefrom to provide portions to which the

improved support may be attached. The support includes a threaded elongated shank member 7. This shank member is of sufficient length to extend beyond the edges of an I-beam. One end of the shank member is bent to form a bridle ring portion 8. This ring may be so arranged with respect to the shank member that the axis of said ring lies in parallel relation to the shank when it is desired to have the wire or conductor runs extend in the direction shown in Fig. 3 of the drawing. When it is desired to have the wire or conductor runs 9 extend in the direction indicated in Fig. 4, the bridle ring 8 is turned so that its axis lies in a perpendicular relation to its shank. The wire or conductor runs, of course, may be extended in other angular directions than those just referred to by bending the bridle ring at a desired angle.

A pair of clips or brackets 10, 10 are movably mounted on the shank member 7 in oppositely positioned relation to each other. These clips or brackets are adapted to clamp and firmly grip the exposed edges of the bottom flange of the I-beam 5 and hold the improved support securely thereon. In Fig. 1 these flange-engaging members are shown as having a substantially arcuate formation, the upper portions extending further from the opening through which the shank member passes than the lower portions to provide a maximum engaging area. In Fig. 2 the flange-engaging members 10, 10 are shown as of substantially rectangular formation and have upper portions 11 of triangular shape which extend therefrom. These portions are adapted to pass over the flange edges, as indicated in Fig. 4 of the drawing. Lock nuts 12 are provided on the shank at each side of the flange-engaging members 10, 10 to bind and hold them against the edges of the flanges when the members 10, 10 are adjusted in desired positions.

It will be apparent from the above description that the improved support is attached to carry wire or conductor runs closely adjacent a ceiling.

While the arrangements of this invention have been illustrated as embodied in certain specific forms which have been deemed desirable, it will be understood that they are capable of embodiment in many and widely varied forms without departing from the spirit of the invention as defined in the appended claims.

What is claimed is:

1. A support for wires and cables including a threaded elongated shank member, oppositely positioned clamping members movable thereon, and

a ring member integral with and carried on one end of the shank member.

2. A support for wires including a threaded elongated shank member, oppositely positioned clamping members movable thereon, locking means carried by the shank member on each side of the clamping members to bind them in position on the shank, and a ring member integral with and carried on one end of the shank member.

3. A support adapted to be attached to I-beams and the like to hold wire runs closely adjacent a ceiling, said support having a threaded elongated shank member, a ring member on one end of the shank member and integral therewith through which the wire runs pass, and clamping

means engaging a flange of the I-beam to lock the support thereto.

4. A support adapted to be attached to I-beams to hold wire runs closely adjacent a ceiling, said support having a threaded elongated shank member, a bridle ring positioned at one end of the shank member and integral therewith through which wire runs pass, said bridle ring being adapted to be turned with respect to the shank member to carry wire runs in a direction parallel to the I-beams and also perpendicular thereto, clamping means carried by the shank for engaging a flange of the I-beam, and locking means for holding the clamping means in position.

CHARLES WILLIAM ROBERTS.