Nov. 12, 1929. H. G. OLIVER 1,735,127

SPACING DEVICE

Filed May 10, 1927

Fig. 1.

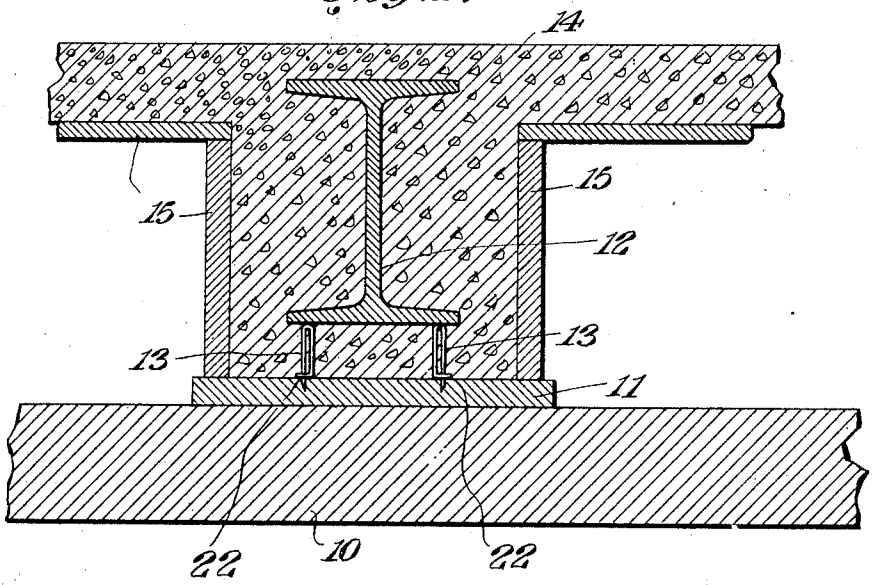


Fig. 2.

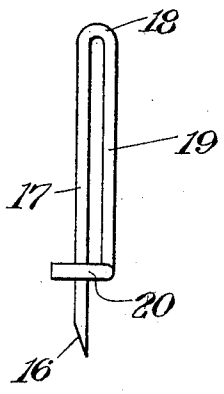
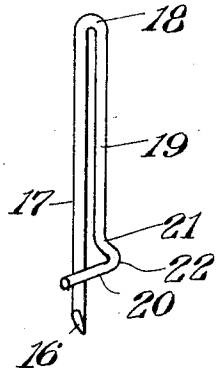


Fig. 3.



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UNITED STATES PATENT OFFICE

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SPACING DEVICE

Application filed May 10, 1927. Serial No. 190,202.

This invention appertains broadly to improvements in spacing devices and more particularly to improvements in spacing devices for use in building constructions.

The invention aims to provide a simple, cheap and efficient device for spacing elements of a building construction.

A further object of this invention is to provide a spacing device formed from a single piece of wire, said device having a pointed end to facilitate its penetration into one element of a building construction and having means to limit its entry into said element whereby the portion projecting from the element is of accurate predetermined amount.

With the above and other objects in view, the invention further resides in the details of construction characterizing the spacing device and more particularly pointed out in the following description of the accompanying drawings forming a part of this specification.

In the drawings:

Figure 1 is a sectional elevational view through a building construction showing the application of the invention in practice;

Figure 2 is a front elevational view of the preferred embodiment of the invention; and

Figure 3 is a perspective view of the spacing device illustrated in Figure 2.

For the purpose of illustrating my invention I have shown a specific application to a building construction, although I desire to have it understood that my invention is not limited to said application.

As shown in Figure 1, the building construction in question is a concrete floor including a sweep 10 supporting a soffit board 11. Above the soffit board 11 and disposed in spaced relation therewith, there is a beam, preferably a steel I-beam 12 of conventional construction, the I-beam being maintained in spaced relation to the soffit board by means of the spacing devices 13. On top of the soffit board also and around the I-beam there is a concrete floor 14 which is formed and cast on top of the haunch boards, 15, which are subsequently withdrawn after the concrete has attained sufficient set to be self-supporting.

The I-beam serves as a reinforcement for the floor and a number of these beams are arranged at spaced intervals in the floor in the customary manner.

The present invention resides particularly in the spacing device which is employed for maintaining the I-beam spaced above the soffit board at a predetermined amount while the concrete floor is being poured so that the beam becomes embedded in said floor and the concrete surrounds the same. By reference to Figures 2 and 3, it will be noted that the spacing device of this invention comprises a single piece of substantially rigid wire having a pointed end 16 to facilitate its penetration into the soffit board and a straight portion 17 which terminates in a reverse bend 18 of about one hundred and eighty degrees to provide another straight portion 19 extending in substantial parallelism to the portion 17 and slightly spaced therefrom. The free end of the straight portion 19 terminates in an off-set portion 20 extending substantially perpendicular to the portions 17 and 19 formed by the provision of bends 21 and 22 of about ninety degrees each. The straight portion, 19, is shorter than the portion 17 so that the off-set portion 20 is above the pointed end, 16, as shown.

The spacing device is adapted to be forceably inserted or hammered into the soffit board 11, the pointed end 16 facilitating the penetration of the device. The extent that the spacing device may penetrate the soffit board is limited, however, by the off-set member 20 which serves as a stop to define the extent of penetration of the soffit board by the spacing device. The provision of the stop 20 further determines the amount of the spacing device projecting from the soffit board so that the amount that the beam is spaced from the soffit board is predetermined with accuracy.

It will be noted that the spacing device of this invention is simple in construction, cheap to manufacture and efficient in service. The portion of the spacing device projecting from the soffit board and actually serving to space and support the beam 12 has a double strength owing to the provision of the two portions 17 and 19 in the space between the beam and soffit board and there is little tendency for the beam to cause a col-

lapse of said spacing devices in service. The provision of a spacing device having a double thickness of wire over the part adapted to perform a spacing function and subject to stress arising from the weight of the member carried, permits the use of a smaller number of devices than if only a single thickness of wire was utilized for spacing and supporting. Another feature of the spacing device of this invention to which attention is directed is that the distance between the straight portions 17 and 19 is less than the thickness of the wire so that there is no danger of the spacing devices becoming interlocked or interconnected when they are massed or piled together as is the case in practice. The spacing device in its application to the building construction disclosed has a further advantage in that the concrete penetrates the opening between the straight portions, 17 and 19, and forms an intimate union with the device.

While I have described a specific embodiment of my invention it will be understood that various modifications and alterations may be made therein without departing from the spirit of the invention or its scope as defined by the appended claims.

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

1. A means for spacing and supporting one member from another member, comprising a wire-like element having a substantially straight portion, terminating in a pointed end, a reverse bend at the other end of the straight portion, another substantially straight portion extending from said bend back on the first portion for a part of the length thereof, and an off-set portion on the free end of the second portion, said off-set portion acting as a stop to limit the penetration of the pointed end.

2. A means for spacing and supporting one member from another member, comprising a wire-like element having a substantially straight portion terminating in a pointed end, a reverse bend at the other end of the straight portion, another substantially straight portion extending from said bend back on the first portion for a part of the length thereof and in spaced, substantially parallel relation to the first portion, and an off-set portion at the free end of the second portion, said off-set portion acting as a stop to limit the penetration of the pointed end.

In testimony whereof, I have signed my name to this specification this 6th day of May, 1927.

HERBERT G. OLIVER.