Dec. 19, 1950 A. SILBERMAN 2,534,739

PIPE HOOK

Filed Dec. 17, 1947

FIG. 1

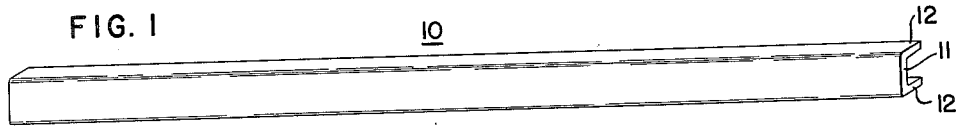


FIG. 2

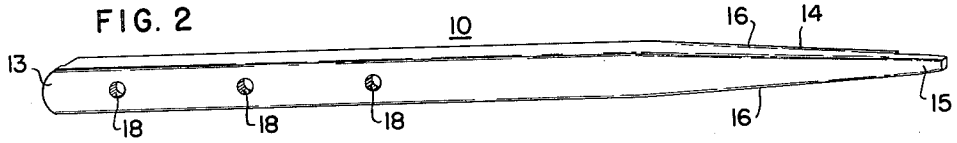


FIG. 3

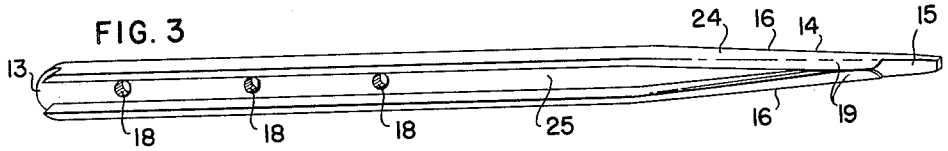


FIG. 4

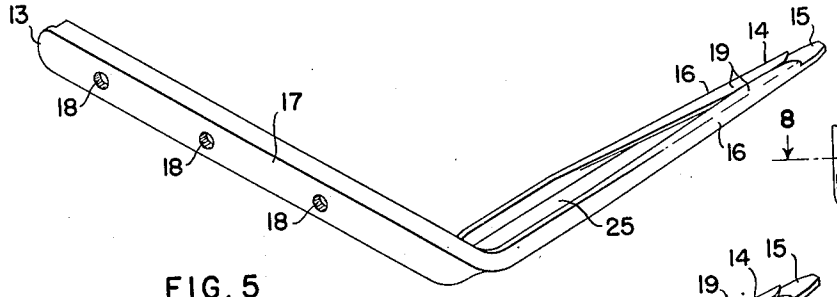


FIG. 7

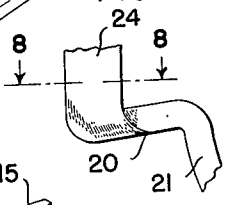


FIG. 5

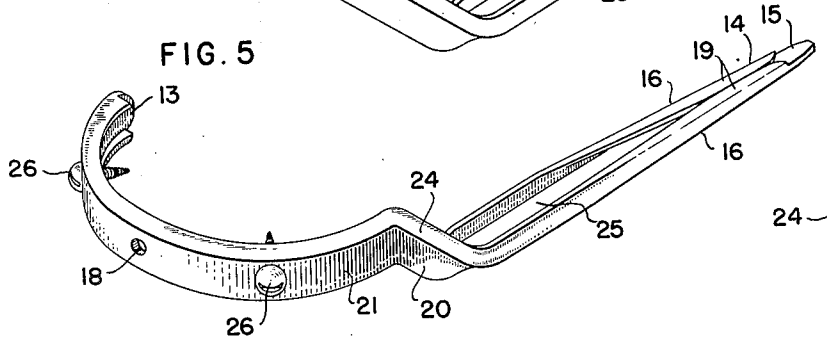


FIG. 8

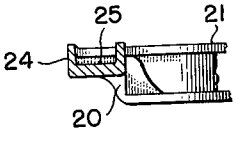
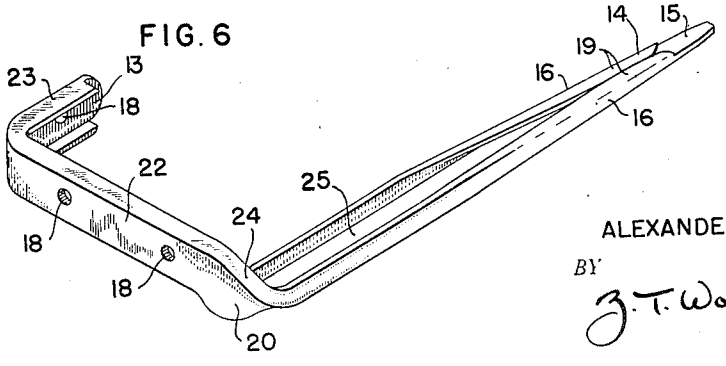


FIG. 6



INVENTOR.
ALEXANDER SILBERMAN

BY
J. T. Wolcott 2nd

ATTORNEY.

Patented Dec. 19, 1950 2,534,739

UNITED STATES PATENT OFFICE

2,534,739

PIPE HOOK

Alexander Silberman, Upper Providence Township, Delaware County, Pa., assignor to Penn Supply and Metal Corporation, Philadelphia, Pa., a corporation of Pennsylvania

Application December 17, 1947, Serial No. 792,154

1 Claim. (Cl. 248—48.2)

1

This invention relates to conductor pipe hooks and methods of making the same.

It is the principal object of the present invention to provide an improved conductor pipe hook which is rigid and which is particularly suitable for retaining plain or corrugated rain spouting and the like from slipping with respect to the conductor band.

It is a further object of the present invention to provide a conductor pipe hook which is capable of permanent attachment to the pipe.

It is a further object of the present invention to provide a conductor pipe hook having an improved drive which is adapted for mounting and gripping in either wood or masonry, as desired.

It is a further object of the present invention to provide a conductor pipe hook having improved provisions for securing the same in place in a wall, or the like.

It is a further object of the present invention to provide improved methods of making conductor pipe hooks of the character aforesaid.

It is a further object of the present invention to provide improved methods of forming conductor pipe hooks in which the strength of the material is retained after formation of the pipe hook and in certain respects enhanced.

Other objects and advantageous features will be apparent from the specification and claim.

The nature and characteristic features of the invention will be more readily understood from the following description, taken in connection with the accompanying drawings forming part hereof, in which:

Figure 1 is a view in perspective of a unit length of channel section from which the conductor pipe hook in accordance with the present invention is formed;

Fig. 2 is a perspective view showing one stage in the formation of the conductor pipe hook;

Fig. 3 is a perspective view showing another stage in the formation of the conductor pipe hook;

Fig. 4 is a perspective view showing certain of the bending operations at another stage in the formation of the conductor pipe hook;

Fig. 5 is a view in perspective of one form of completed conductor pipe hook;

Fig. 6 is a view in perspective showing another form of completed conductor pipe hook;

Fig. 7 is a fragmentary elevational view illustrating certain of the details of the conductor pipe hook between the band and the drive; and

Fig. 8 is a fragmentary sectional view taken approximately on the line 8—8 of Fig. 7.

2

Like numerals refer to like parts throughout the several views.

It should, of course, be understood that the description and drawings herein are illustrative merely, and that various modifications and changes may be made in the structure disclosed without departing from the spirit of the invention.

Referring now more particularly to the drawings, there is illustrated in Fig. 1, a unit length of channel 10 from which the conductor pipe hook is made, the channel preferably being of wrought steel rolled to the desired cross section and with a web 11 and flanges 12. The unit length of channel 10 is preferably cut from a longer piece in any desired manner.

As the initial steps to be performed on the length of channel, and as indicated in Fig. 2, one end 13, which is to form the terminus of the band of the hook, is preferably rounded and portions of the flanges 12 adjacent thereto are cut away. At the other end 14, which is to form the drive of the hook, the flanges 12 are cut away and the terminus 15 of the end 14 is formed into a blunt chisel shape.

The flanges 12 and the web 11 intermediate the midportion of the unit length of channel 10 and the terminus 15 are tapered as at 16 with respect to the longitudinal axis and inwardly towards the terminus 15. At any preferred stage during the formation of the conductor pipe hook, and preferably while the ends of the unit length of channel 10 are being formed, a plurality of holes 18 are preferably provided in the web 11 of the unit channel 10 and extending therethrough for purposes to be explained. As a further stage in the formation of the conductor hook, the flanges 12 at the section 14 are preferably flattened and spread inwardly into contact with each other as illustrated at 19 in Fig. 3 to complete this portion of the conductor hook.

The unit length of channel 10 is then bent, intermediate its ends, by a multiple bending as at 20, by which a short leg 24 of a portion 17 of the unit length 10 is disposed at an angle slightly less than a right angle with respect to the remaining portion 14 of the unit length and also twisted through an angle of 90 degrees so that, upon the completion of the bending, the longitudinal axis of the portion 17 is disposed in the same plane as the longitudinal axis of the portion 14 of the unit channel piece 10.

The band is then formed in the portion 17 beyond the leg 24 of the desired shape and may be arcuate as indicated at 21 in Fig. 5 for use

with conductor pipes of circular or circular and corrugated cross section, or may have a flat portion **22** disposed at right angles with respect to the drive **14** as indicated in Fig. 6 with an end **23** disposed at 90 degrees with respect to the flat portion **22**, for use with conductor pipes of square or rectangular cross section.

A conductor pipe hook is thus provided having a drive **14** with a chisel point **15** at the end for penetrating wood or masonry. The drive **14** has a tapered portion adjacent the terminus **15** for engagement with the wood or masonry in which the hook is to be mounted, and with a tapered recess or open space **25** closed at one end by the flattened flanges **19**, which provides a gripping channel for retaining the conductor pipe hook in fixed engagement upon insertion.

The offset of the band **21** or **22** by the leg **24** from the longitudinal axis of the drive **14** provides for convenient access for hammering in alinement with the axis of the drive, thereby facilitating the insertion of the hook.

The interior of the band, either of arcuate shape, as illustrated in Fig. 5, or of flat shape with an end hook, as illustrated in Fig. 6, provides surfaces for gripping engagement with the exterior of the conductor pipe. The holes **18** are provided for the insertion of self tapping metal screws **26**, which, by their engagement with the conductor pipe (not shown), prevent the conductor pipe from slipping or moving with respect to the pipe hook after assembly.

I claim:

A conductor pipe hook comprising a unitary length of channel having a band portion at one end with the flanges of the channel extending therealong on the interior thereof, a driving portion at the other end with the flanges of the channel extending therealong, said driving portion having a tapered terminal end portion with a blunt point and a longitudinally extending channel closed at the end adjacent the terminus with the flanges in flattened relation to the web, and a connecting portion between said band portion and said driving portion, said connecting portion having the flanges of the channel extending along the interior thereof, and said band portion having a plurality of spaced openings through the web between the flanges for the reception of fasteners for engagement with the conductor pipe.

ALEXANDER SILBERMAN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
911,877	Iwan	Feb. 9, 1909
1,002,640	Burne	Sept. 5, 1911
1,594,101	Knab	July 27, 1926
1,632,327	Berger	June 14, 1927
2,439,616	Wolfe	Apr. 13, 1948

FOREIGN PATENTS

Number	Country	Date
8,544 of 1927	Australia	July 28, 1927
26	Great Britain	Jan. 1, 1914