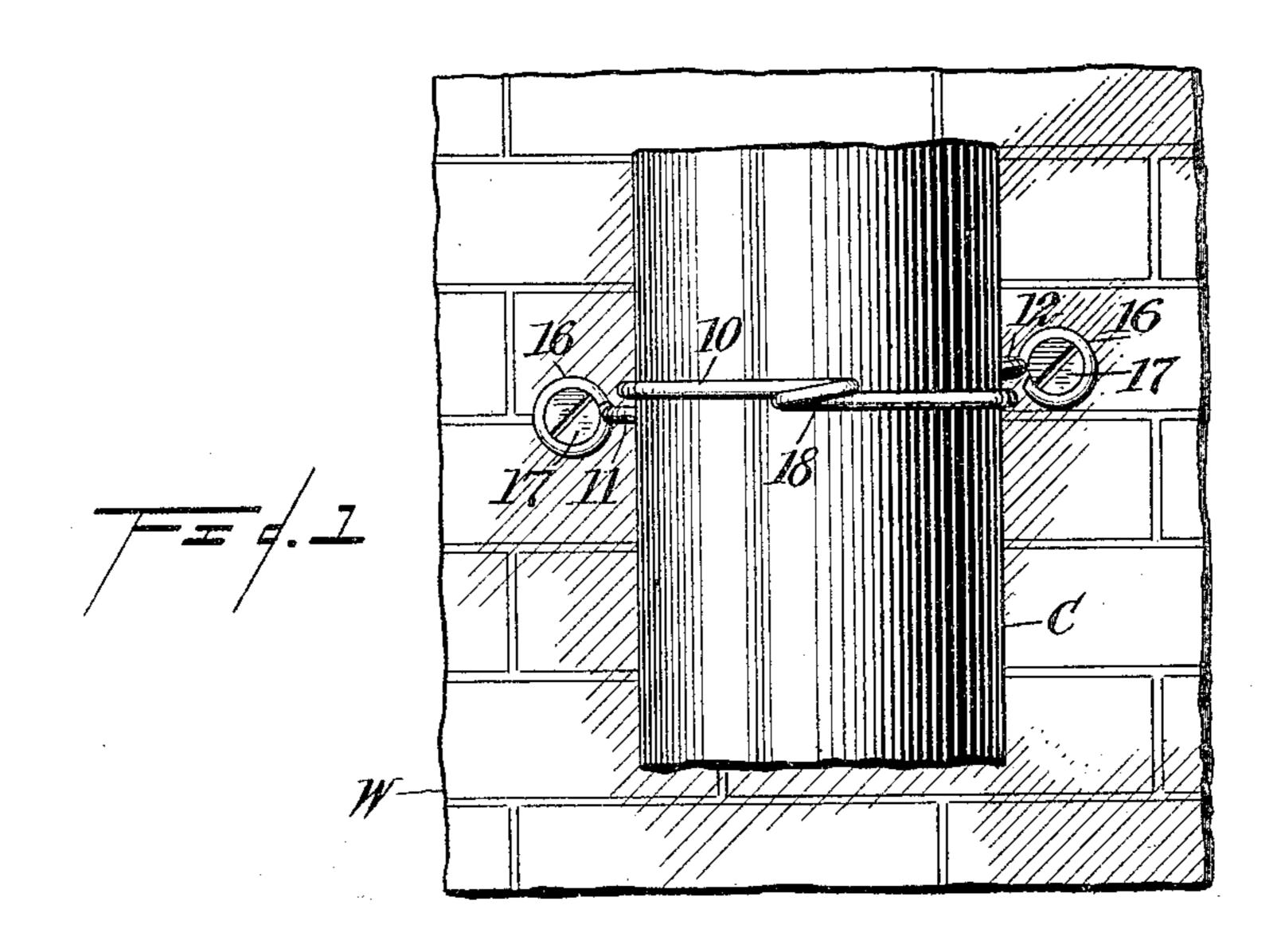
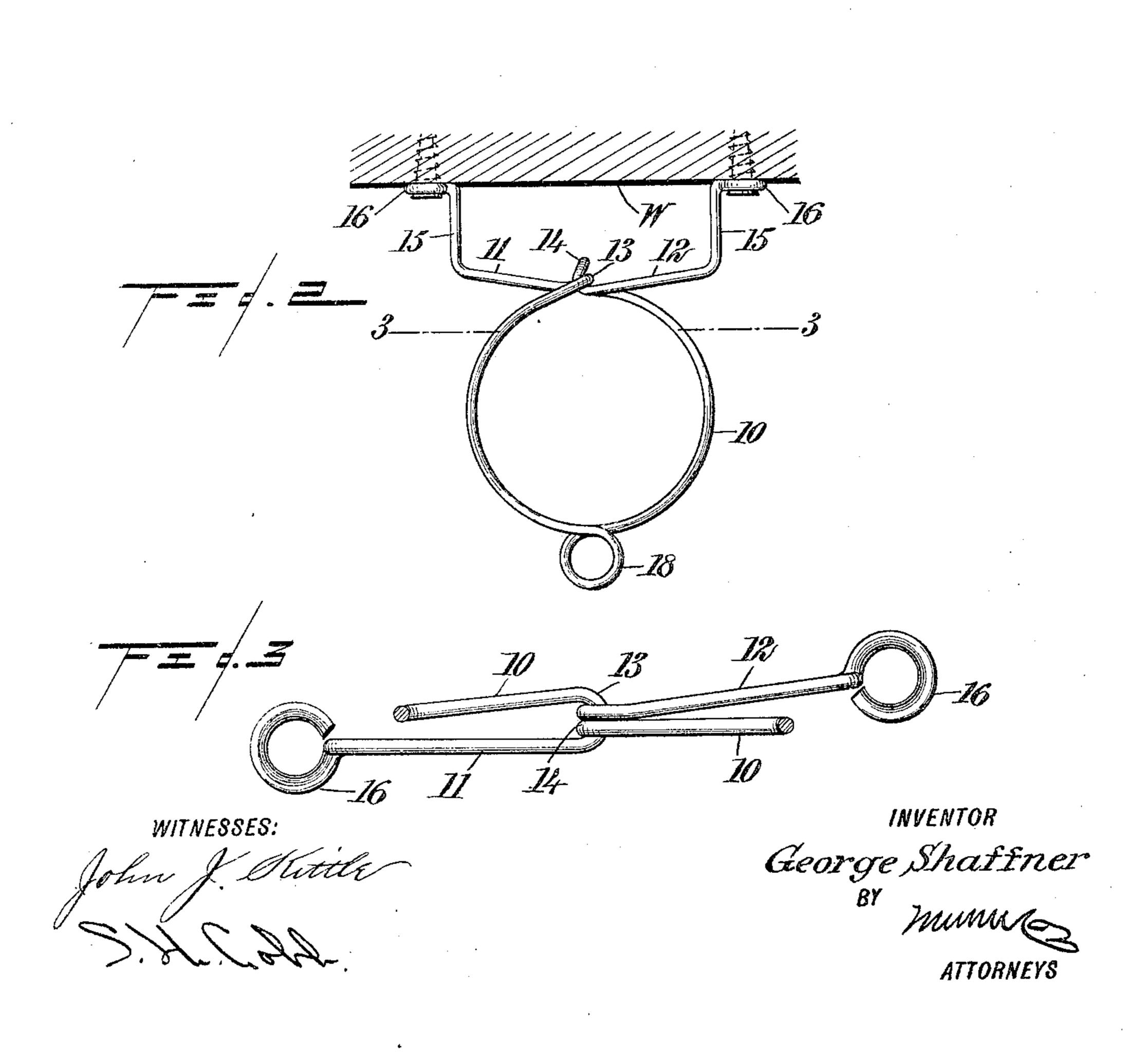
G. SHAFFNER. SUPPORT. APPLICATION FILED FEB. 6, 1905.





UNITED STATES PATENT OFFICE.

GEORGE SHAFFNER, OF DALLAS CITY, ILLINOIS, ASSIGNOR OF ONE-THIRD TO GEORGE SHAFFNER, ONE-THIRD TO CLAUDE SHAFFNER, AND ONE-THIRD TO ROBERT H. GRAY, ALL OF DALLAS CITY, ILLINOIS.

SUPPORT.

Specification of Letters Patent.

Patented May 29, 1906.

Application filed February 6, 1905. Serial No. 244,469.

To all whom it may concern:

Be it known that I, George Shaffner, a citizen of the United States, and a resident of Dallas City, in the county of Hancock and 5 State of Illinois, have invented a new and Improved Support, of which the following is

a full, clear, and exact description.

This invention relates to hangers or supports for pipes, down-spouts, conductors, and 10 the like, and has for its object to provide a simple, inexpensive, and efficient device of this character by means of which the downspout or conductor may be securely fastened in position on the walls of a building or simi-15 lar structure.

A further object of the invention is to provide a hanger or support capable of exerting a positive grip on the pipe or conductor without danger of straining or displacing the nails

20 or other fastening devices.

A still further object is to generally improve this class of devices so as to add to their utility, durability, and efficiency, as well as

to reduce the cost of manufacture.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in 30 the claims hereto appended, it being understood that changes in form, proportions, and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings, forming a 35 part of this specification, Figure 1 is a front elevation of a pipe hanger or support constructed in accordance with my invention, showing the same in position on a wall. Fig. 2 is a top plan view of the same detached. 40 Fig. 3 is a transverse sectional view taken on

the line 3 3 of Fig. 2.

Similar characters of reference indicate corresponding parts in all of the figures of the

drawings.

The improved hanger is particularly designed for supporting down-spouts or rainwater conductors in position on the exterior walls of buildings and by way of illustration is shown attached to a wall W and support-50 ing a conductor of the usual construction, (indicated at C.)

The improved hanger is preferably formed from a single piece of spring-wire, an inter-

mediate portion of which is bent to form an eye 18 and thence curved laterally to produce 55 a spring ring or loop 10, adapted to receive and embrace the conductor C.

One end of the wire at the open end of the loop 10 is bent upon itself and extended laterally in spaced relation to the adjacent walls 60 of said loop to form an elongated loop or keeper 13, adapted to receive a hook 14, the latter being formed in the wire at the adjacent open end of the loop 10 and disposed at substantially right angles to the longitudinal 65 axis of said loop, as shown.

The ends of the wire after the keeper 13 and angularly-disposed hook 14 are formed are extended in opposite directions at 11 and 12 and thence bent inwardly to form parallel 70 arms 15, which serve to space the loop 10 from the side of the building, the ends of the arms 15 being bent laterally to produce terminal eyes 16, adapted to receive screws or similar fastening devices for retaining the 75 hanger in position on the wall.

The eye 18 is preferably formed at the center of the loop 10 and disposed in alinement with the hook 14, so that a rod or other tool may be conveniently inserted in said eye and 80 the latter twisted in order to clamp the loop 10 in engagement with the conductor.

By having the open end of the loop 10 formed with interengaging parts, as shown, when the eye 18 is twisted to grip the con- 85 ductor the hook 14 will be sorced into engagement with the keeper 13, and thereby prevent the arms 11 and 12 from being drawn together and straining or displacing the fastening devices.

In operation when it is desired to secure the conductor to a wall or other portion of a building the hangers may be placed on the conductor by expanding the loop 10 and causing the walls thereof to embrace the con- 95 ductor, after which the hanger may be adjusted longitudinally of the pipe and securely clamped in adjusted position by inserting a tool in the eye 18 and rotating said tool, the conductor being subsequently secured to the 100 walls by means of screws or similar fastening devices, as shown. If desired, however, the hangers may be first positioned on the wall and the pipe or conductor afterward threaded through the loops and clamped by twisting 105 the eye in the manner before stated.

Attention is called to the fact that by having one end of the keeper open it permits the ready introduction and removal of the hook when attaching or detaching the hanger, 5 while by reason of the construction and disposition of said hook and keeper the hanger may be readily adjusted to clamp pipes of different diameters without liability of straining the fastening devices.

Having thus described the invention, what

is claimed is—

the hook.

1. A pipe-hanger comprising a loop adapted to embrace the pipe and having its side walls at the open end of the loop provided vith interlocking parts terminating in oppositely-disposed supporting-arms.

2. A pipe-hanger comprising a loop adapted to embrace the pipe and formed with a laterally-extending eye, the side walls of the 20 loop at the open end thereof being provided with interlocking parts terminating in oppo-

sitely-disposed supporting-arms.

3. A pipe-hanger comprising a loop adapted to embrace the pipe and having one of its 25 side walls at the open end of the loop bent to form a hook and its opposite side wall provided with a keeper adapted to receive the hook, said hook and keeper being extended laterally in opposite directions and in the 30 same plane with the loop to form supportingarms.

4. A pipe-hanger comprising a loop adapted to embrace the pipe and having one of its side walls at the open end of the loop bent to 35 form a hook and its opposite side wall provided with a keeper adapted to receive the hook, said hook and keeper being extended laterally in opposite directions and in the same plane with the loop to form supporting-40 arms, there being an eye formed in the walls of the loop and disposed in alinement with

5. A pipe-hanger comprising a loop adapted to embrace the pipe and having one of its side walls at the open end of the loop bent 45 upon itself and extended laterally in spaced relation to the adjacent wall of the loop to form a keeper and its opposite side wall bent to form a hook adapted to engage said keeper, there being an eye formed in the walls of said 50 loop for the reception of a clamping-tool.

6. A pipe-hanger comprising a loop adapted to embrace the pipe and having one of its side walls at the open end of the loop bent upon itself and extended laterally in spaced 55 relation to the adjacent wall of the loop to form a keeper and its opposite side wall bent at substantially right angles to the longitudinal axis of the loop to form a hook adapted to engage said keeper, there being an eye 60 formed in the wall of the loop and extending

in the same plane therewith.

7. As a new article of manufacture, a pipehanger formed of a single piece of wire an intermediate portion of which is bent to form 65 an eye and thence curved laterally to produce a supporting-loop, a portion of one end of the wire at the open end of the loop being bent to form a keeper and the end thereof extended laterally to form a supporting-arm terminat- 7° ing in an eye, the opposite end of said wire at the open end of the loop being bent to form a hook for engagement with the keeper and thence extended laterally to form a similar supporting-arm terminating in a correspond- 75 ing eye.

In testimony whereof I have signed my name to this specification in the presence of

two subscribing witnesses.

GEORGE SHAFFNER.

Witnesses: HERBERT L. JACKSON, ROBERT H. GRAY.