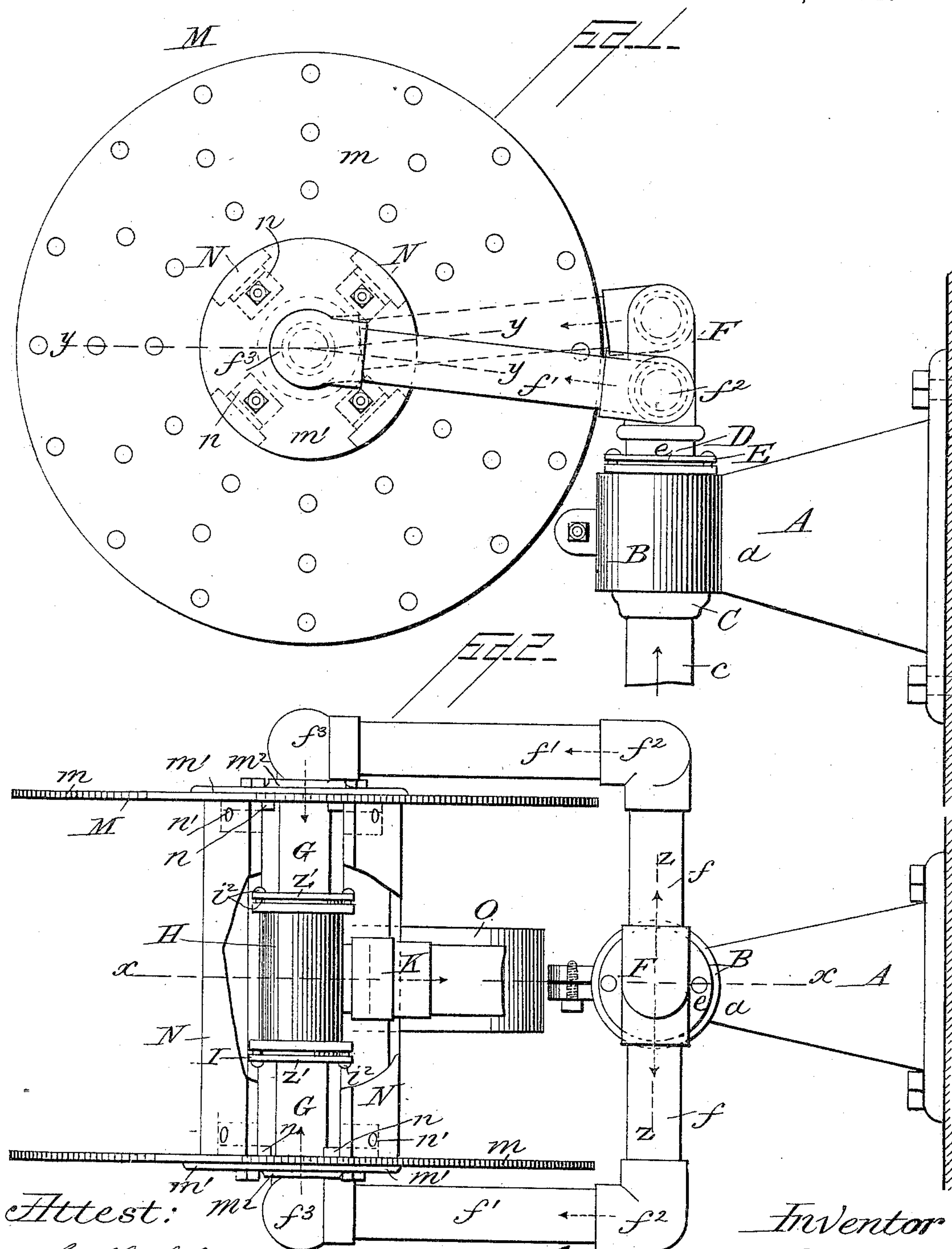


2 Sheets—Sheet 1.

No. 446,745.

Patented Feb. 17, 1891.



Attest:

F. H. Schott  
J. Burroughs

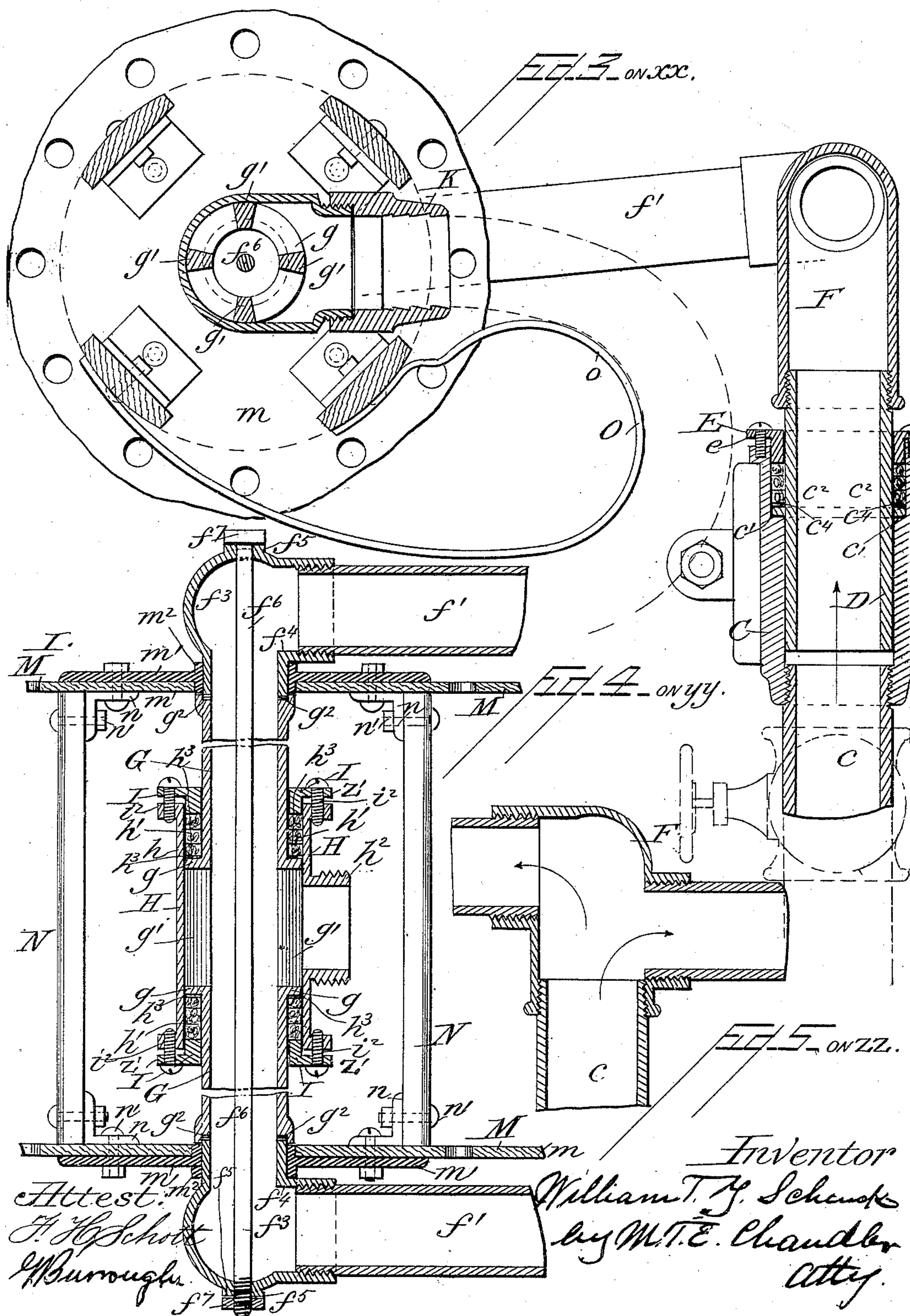
Inventor

William T. Y. Schuck  
by M. T. E. Chandler  
att'y.

2 Sheets—Sheet 2.

No. 446,745.

Patented Feb. 17, 1891.





# UNITED STATES PATENT OFFICE.

WILLIAM T. Y. SCHENCK, OF SAN FRANCISCO, CALIFORNIA.

## HOSE-REEL.

SPECIFICATION forming part of Letters Patent No. 446,745, dated February 17, 1891.

Application filed December 20, 1889, Serial No. 334,373. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM T. Y. SCHENCK, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Hose-Reels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The invention relates to improvements in hose-reels of the class adapted to be attached to supports secured within buildings and which will turn in any direction without danger of kinking or not unwinding; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the accompanying drawings, in which similar letters of reference designate corresponding parts, Figure 1 is a side elevation of a reel embodying the invention. Fig. 2 is a plan view of the same. Fig. 3 is a sectional view on the line  $xx$  of Fig. 2. Fig. 4 is a sectional view on line  $yy$  of Fig. 1. Fig. 5 is a similar view on line  $zz$  of Fig. 2.

Referring to the drawings by letter, A designates the reel-supporting bracket, provided with a base having a suitable number of arms perforated for attachment, by screws or otherwise, to a proper point within a building.

B is a hollow head or tubular socket on the outer end of the arm  $a$  of the bracket A, and C is a sleeve fitting therein, with its lower end, which projects below the socket, threaded internally to engage the upper end of the stand-pipe  $c$  within the building.

$c'$  is a rectangular rabbet within the upper end of the sleeve C to receive the packing  $c^2$ , and  $c^4$  is a metal packing-ring or washer resting upon the flange of the tube D within the sleeve. The upper end of the sleeve is provided with an outstanding circumferential flange which lies upon the upper end of the socket.

D is a tube aligned with the stand-pipe within the sleeve C, and E is a stuffing-box

sleeve, which surrounds the tube D, enters the rabbet of the sleeve C, pressing upon the packing therein, and is provided with the outstanding circumferential flange  $e$ , through perforations in which it is bolted to the similar flange of the sleeve. The upper end of the tube D is externally threaded to engage the vertical arm of a T-shaped coupling-piece F, the lateral arms of which are engaged by the inner externally-threaded ends of the transverse pipe-sections  $f f$ , which have their outer ends connected to the adjacent ends of the longitudinal pipe-sections  $f' f'$  by coupling-pieces  $f^2 f^2$ . The tube D extends within the sleeve C below the packing-ring  $c^4$  and nearly to the top of the stand-pipe, thus giving it a long bearing that prevents any cramping or binding that might otherwise be caused by the weight of the reel hereinafter described. The outer ends of the pipe-sections  $f'$  are connected by similar coupling-pieces  $f^3 f^3$  to the outer ends of the transverse pipe-sections G, which are provided on their inner ends with outstanding circumferential flanges  $g g$ .

The T-shaped coupling-piece F has one of its lateral arms bent upward and again outward, so that the pipe-section  $f$ , that is engaged to said arm, stands higher than the pipe-sections  $f$  on the opposite side, and the lateral pipe-sections  $f' f'$  converge upward and downward from the pipe-sections  $f$  to the pipe-sections G, which are aligned, and upon which the reel is mounted. The bends of the coupling-pieces  $f^3$  are rectangular on their inner sides, as at  $f^4$ , and the said pieces are rounded or spherical on the outer sides of the bend, which spherical portions are perforated in alignment with the common axis of the pipe-sections G, and flat seats  $f^5$  are formed on the outside around said perforations.

$f^6$  is a brace-rod, which extends through the pipe-sections G in the axis thereof, and its ends, which pass out of the perforations in the coupling-pieces  $f^3$  at the outer ends of said pipe-sections, are threaded and engaged by nuts  $f^7$ , that bear against corresponding seats  $f^5$ . On account of one of the pipe-sections  $f$  being about two and one-half inches above the other and the pipe-sections  $f'$  converging therefrom to the common axis of the pipe-sections G, the pipe-sections  $f'$  are caused



to form braces to support the reel and also to prevent the threads of the coupling-pieces and pipe-sections from giving or stripping when a hard pull is given on the hose attached to the reel.

The facing ends of the pipe-sections G are connected by the bars  $g'$ , preferably equidistant and four in number, which greatly increases the rigidity of the sections and keeps their axes aligned, and the opposite ends of the pipe-sections are provided on their outer surfaces with circumferential rectangular rabbets  $g^2$   $g^2$ , in which bear the ends of the adjoining coupling-pieces  $f^3$   $f^3$ , the brace-rods  $f^6$  and nuts  $f^7$  keeping the pipe-sections G and the coupling-pieces  $f^3$  together. The said ends and flanges stand within the lateral arms  $h$  of a T-shaped coupling-piece H, which arms have outstanding circumferential flanges on their ends, as shown in Fig. 1. The middle arm  $h^2$  of the coupling-piece H is threaded externally to engage the thimbles K of the hose  $k$ . (Shown in broken lines in Fig. 3.)

The joint at the coupling-piece H is made water-tight by the following means:  $h'$  is a packing of any suitable material inserted between the walls of the arms  $h$  and the pipe-sections G, and  $h^3$   $h^3$  are metal packing-rings that rest upon the flanges  $g$  between the latter and the packing  $h'$ . I are glands or stuffing-box sleeves which surround the pipe-sections G. The inner ends of said sleeves press upon the adjoining packing  $h'$ , and their outer ends are provided with outstanding circumferential flanges  $i'$ , provided with perforations for the screws  $i^2$ , which engage in suitable threaded perforations in outstanding flanges of the arms  $h$ .

L is the reel, composed of two similar end wheels M and the rails N, connecting said wheels. Each wheel M is composed of a disk  $m$ , of wood veneer, perforated similarly to a chair-bottom for the sake of lightness, and a thin annular plate  $m'$ , bolted to the said disk and having centrally the hub  $m^2$ , which is mounted on the corresponding pipe-section G and the adjacent coupling-piece  $f^3$ , its outer end resting in the angular bend of said coupling-piece to prevent the reel from moving longitudinally.

The rails N, which are preferably four in number and equidistant, are connected to wheels M by the following means:  $nn$  are angle-irons, each with one arm resting against the inner surface of the adjacent disk  $m$  and the other resting against the inner surface of a rail N. Both of said arms are perforated for the passage of bolts  $n' n'$ , by means of which and suitable nuts the annular plates and wooden disks are secured together and the ends of the rails are secured to the angle-irons.

O is a spring-plate attached to two adjacent slats N and convex outwardly, being provided with the sharp convex curve  $o$ , over which the hose is passed when making its first turn on the reel to prevent it breaking or making

an abrupt bend when leaving the thimble K. It is evident from the foregoing that the sleeves C and E and the bolts or screws and packing, as described, constitute a stuffing-box in which the tube D can turn freely without leaking, so that thereby it is possible to swing the reel and attached hose laterally into any desired position, and as the coupling-piece H, sleeves I, and accompanying screws and packing form two similar packing-boxes, the said stuffing-boxes, with the attached thimble K and hose  $k$ , may be rotated on the pipe-sections G. By permitting the water to have access to the hose from each side all unequal lateral pressure is obviated.

Having thus described my invention, what I claim, and desire to secure Letters Patent for, is—

1. The combination of the aligned water-tubes G, the T-shaped coupling-piece mounted and turning on said tubes, the hose connected to the middle arm of the coupling-piece, and the reel mounted and turning on the tube-sections G, substantially as specified.

2. The combination, with the stand-pipe and the tubular system into which said pipe discharges, and which consists of the tubes  $f f'$  and facing aligned tubes G, of the T-shaped coupling-piece mounted and rotatable on the tubes G, the reel mounted and rotatable on said tubes, and the hose attached to the middle arm of the T-shaped coupling-piece.

3. The combination, with the stand-pipe, the supported stuffing-box thereabove, the tube D, fitting and rotatable in said stuffing-box, and the system of tubing connected to the said tube and consisting of the tubes  $f f'$  and aligned facing tubes G, of the T-shaped coupling-piece mounted and turning on the tubes G, the reel mounted and turning on said tubes, and the hose attached to the middle arm of the T-shaped coupling-piece.

4. The combination of the stand-pipe, the T-shaped coupling-piece F, having one lateral arm bent upward and again outward, so that it is higher than the opposite lateral arm, the aligned pipe-sections G, and the side pipe-sections  $f'$ , connecting the respective lateral arms of the T-shaped coupling-piece with the outer ends of the corresponding pipe-sections G, substantially as specified.

5. The combination, with the stand-pipe, the T-shaped coupling-piece, the pipe-sections  $f f'$ , and coupling-pieces  $f^2 f^3$ , of the pipe-sections G, having their facing ends connected by bars  $g'$  and provided at their opposite ends with rectangular rabbets  $g^2$ , the brace-rod  $f^6$ , the nuts  $f^7$ , and the reel mounted on the pipe-sections G, substantially as specified.

6. The combination of a bracket A, secured to the wall of a building, a T-shaped coupling-piece carried by said bracket, and the reel mounted on said coupling-piece, said reel and coupling-piece being adapted to be rotated toward either side, substantially as and for the purpose specified.

7. In a swinging hose-reel, the pivotally-



connected reel-carrying bracket having a hollow head communicating with the water-supply and a hollow arm communicating with the said head and the reel-hub.

- 5 8. In a swinging hose-reel, the combination of the pivotally-connected bracket having a hollow head communicating with the water-supply and a hollow arm communicating with said head, and a reel journaled in the bracket-

arms and having a hollow hub communicating with the hollow arm of the bracket.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM T. Y. SCHENCK.

Witnesses:

P. W. BARTON,  
LEWIS C. HUNTER.