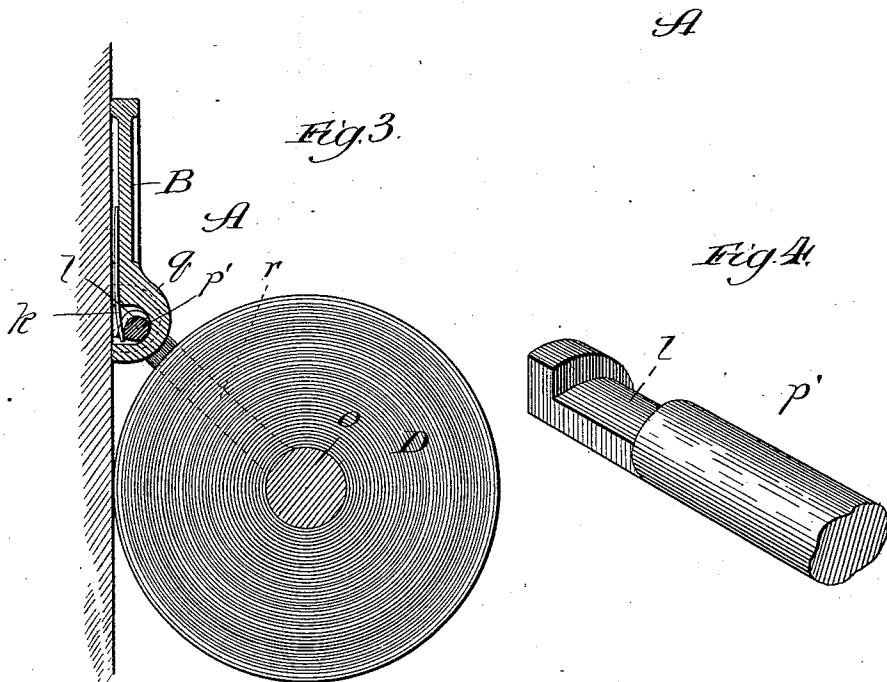
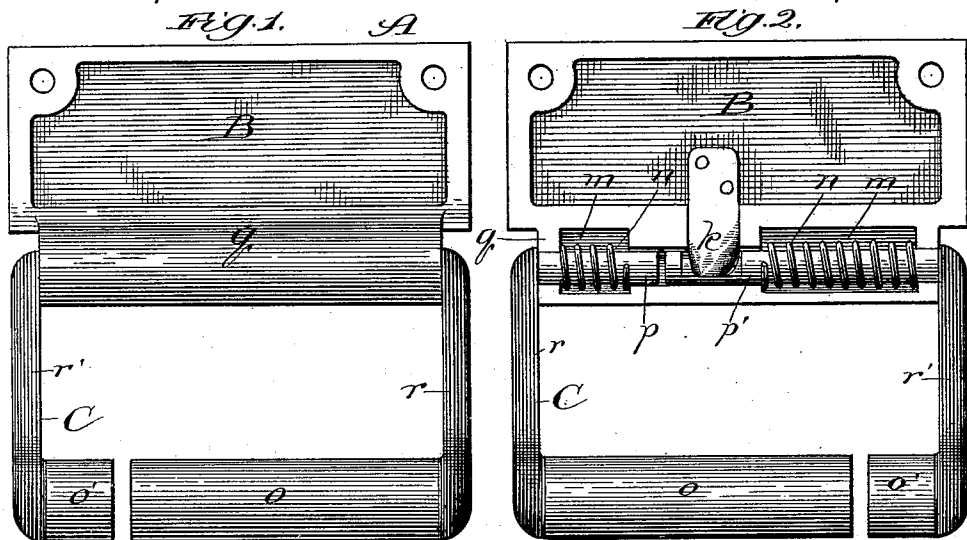


(No Model.)

O. H. HICKS.
PAPER ROLL FIXTURE.

No. 469,855.

Patented Mar. 1, 1892.



Witnesses:

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UNITED STATES PATENT OFFICE.

OLIVER H. HICKS, OF CHICAGO, ILLINOIS.

PAPER-ROLL FIXTURE.

SPECIFICATION forming part of Letters Patent No. 469,855, dated March 1, 1892.

Application filed December 7, 1891. Serial No. 414,292. (No model.)

To all whom it may concern:

Be it known that I, OLIVER H. HICKS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Paper-Roll Fixtures, of which the following is a specification.

My invention relates to an improvement in the class of wall-fixtures for hanging paper in rolls—such as toilet-paper—in which the fixture involves a wall-plate and a pendent pivotal hanger which assumes a downward and forward inclined position when supporting a roll of paper against the wall and descends toward a perpendicular position as the diameter of the roll decreases by tearing sections from it.

The objects of my invention are to provide a construction of hanger which shall facilitate the operation of adjusting a roll of paper in place, to provide simple and effective means for locking the roll in its adjusted position, and to provide improved means for exerting friction strain against the ends of the roll to afford practically uniform resistance to unwinding from it. It may here be stated that the several objects thus enumerated are not necessarily interdependent, but that I design to provide for the accomplishment of any or all of them in the same device.

My further object is to provide a generally improved construction of paper-roll fixture.

In the accompanying drawings, Figure 1 is a view in front elevation of my improved device. Fig. 2 is a view in rear elevation of the same. Fig. 3 is a vertical sectional view of the device, showing it as applied to a wall and carrying a roll of toilet-paper. Fig. 4 is a broken perspective view of a detail of the hanger.

A is the fixture, comprising as its essential features a wall-plate B, having hinged to or pivotally connected with it a hanger C, formed of separate arms r and r' , adapted to support a roll of paper D and independently movable on their pivotal axes in their connection with the wall-plate for facilitating adjustment into place of the roll. As a means for affording a suitable connection of the hanger with the wall-plate I provide the latter with a bearing q at its lower edge, which bearing, as shown, is in the form of a longitudinal section of a

cylindrical tube having its open side at the back of the wall-plate. The arms r and r' , forming the hanger, are connected with the wall-plate at the bearing q in a manner to render at least one, and preferably both, of them pivotal. Thus, as shown, both of the arms are provided with right-angled branches p and p' , which extend into the bearing from opposite ends of the wall-plate, and at the pendent ends of the arms is provided a support between them for the roll D, shown as a stationary cylinder o on the arm r , extending thence toward the companion arm, and a short cylinder or boss o' , extending from the arm r' toward the cylinder o . The relative lengths of parts o and o' , forming the divided roll-support, may be according to variation in details of the construction and mode of operation of the hanger. Thus the part o' may be a mere boss, shorter than illustrated, when for facilitating adjustment of the roll D the arm r might be stationary, since to effect the adjustment conveniently, the movable arm r would only have to be raised to bring the boss o' sufficiently out of alignment with the part o to permit the paper roll to be slipped endwise upon the latter, when by lowering the swinging arm the end of the roll adjacent to the boss would be sufficiently yielding to pass the latter till it coincides with and enters the end of the cylindrical aperture through the center of the roll.

It is desirable that at least one of the arms of the hanger be sufficiently yielding in an outward direction to enable the adjacent end of the roll when lowered to pass it with slight resistance, and this construction also enables the boss or part o' to be made the longer and accordingly to penetrate the farther into the central opening through the roll. As hereinbefore suggested, however, it is preferred that both arms r and r' shall be pivotal, since then either may be raised out of alignment with the other for adjusting the roll upon it; and it is also preferred that both parts r and r' of the divided hanger C be laterally yielding in their pivotal bearings, since then the relative length of the parts o o' of the roll-support is immaterial. Furthermore, the yieldingness of the arm or of either arm should be of a resilient nature, so as automatically to resume after being forced outward the normal

position, wherein they clamp the roll at its opposite ends and thus afford the desired friction against too ready turning of the roll to strip it, the end friction being preferable to such, say, as is sometimes applied at a roll-support, since it remains practically uniform in the sense of being independent of variation in leverage due to change in the diameter of the roll. To afford the resilient quality referred to, I provide the arms of the hanger (or one of the said arms) at the branches p p' thereof with a coiled spring n , surrounding it and confined endwise in a socket m . Thus the desired tension is maintained for the clamping effect of the hanger-arms against the ends of the roll D, which may be readily applied with the fixture in position on a wall by raising, say, the arm r , slipping the roll upon the part o of the support for it, and lowering it to coincide at its aperture with the part o' , which is drawn out against the resistance of the spring m to permit the adjustment and released to fly back and clamp the roll when brought into position.

Where the fixture is used, in public places particularly, it is desirable to lock the roll against removal. This I accomplish by providing a suitable lock in the connection of the hanger with the wall-plate, an especially advantageous form of which is that illustrated, comprising a notch or recess l near the inner end of the branch p' of the rotary hanger-arm r' , which recess extends only part way around the said branch, and a spring-stop k , extending from the rear side of the wall-plate B into the recess l when coincident with it. Thus when the roll D has been adjusted on the support o o' it connects together the two parts of the latter to prevent them from being independently raised or both from being simultaneously raised far enough to bring the recess or notch l out of engagement with the stop k . When the roll is exhausted or approximately exhausted, the arm r' may be raised high enough or lowered far enough to bring the locking-recess l past the stop and the plane surface of the branch p' , representing its full diameter, against the free end of the stop, thereby forcing the latter outward and permitting the branch r' to pass it and be withdrawn out of the end of the usual remnant of the roll to permit the same to be removed on raising the arm r for the adjustment of another roll D.

There are probably other ways than the way herein shown and described of rendering the arms of the hanger C independently swinging. One, but a less desirable, way which suggests itself to me is to hinge the arms or form them in sections connected by hinges without necessarily rendering them pivotal in their connection with the wall-plate. This and other forms of construction for accomplishing my purpose are intended to be included within my invention.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a paper-roll fixture, the combination, with the wall-plate, of a hanger formed with separate arms adapted to support between their free ends the roll of paper, one arm at least being pivotal to swing independently of the other and one arm at least being laterally yielding in its connection with the wall-plate, substantially as described.
2. In a paper-roll fixture, the combination, with the wall-plate, of a hanger formed with separate arms adapted to support between their free ends the roll of paper, one arm at least being pivotal to swing independently of the other and one arm at least being laterally yielding in its connection with the wall-plate, and a lock for securing the hanger when the said rod is adjusted in place, substantially as described.
3. In a paper-roll fixture, the combination of the wall-plate having a hanger-bearing upon it and a hanger formed with arms adapted to support between them the roll of paper and having branches extending into the bearing and pivotally connected with the wall-plate to swing independently of each other and one of which arms at least is laterally yielding, substantially as described.
4. In a paper-roll fixture, the combination, with the wall-plate, of a hanger extending therefrom and formed with independently-swinging arms relatively yielding in a lateral direction at their connection with the wall-plate and adapted to support between their free ends the roll of paper, substantially as described.
5. In a paper-roll fixture, the combination, with the wall-plate, of a hanger extending therefrom and formed with independently-swinging arms relatively yielding resiliently in a lateral direction at their connection with the wall-plate and adapted to support between their free ends the roll of paper, substantially as described.
6. In a paper-roll fixture, the combination, with the wall-plate, of a hanger extending therefrom and formed with pivotal independently-swinging arms relatively yielding resiliently in a lateral direction at their connection with the wall-plate and a roll-support comprising the parts o o' of a divided bearing extending between the free ends of the hanger-arms, substantially as described.
7. In a paper-roll fixture, the combination, with the wall-plate, of a hanger extending therefrom and formed with pivotal independently-swinging arms relatively yielding in a lateral direction at their connection with the wall-plate, a roll-support between the free ends of the hanger-arms, and a lock for the hanger-arms, substantially as described.
8. In a paper-roll fixture, the combination of the wall-plate having a hanger-bearing upon it, a hanger formed with arms having branches pivotally supported in the said bearing to yield relatively in a lateral direction, a lock comprising a recess in a branch of one of the hangers and a spring-stop on the wall-

plate to enter the recess, and a divided roll-support between the free ends of the hanger-arms, substantially as described.

9. In combination, a paper-roll fixture comprising a wall-plate, a hanger formed with separate arms connected with the wall-plate to swing independently of each other and yield laterally with relation one to the other, a divided roll-support between the free ends of the hanger-arms, and a roll of paper on the said support, substantially as described.

10. A paper-roll fixture comprising, in combination, a wall-plate B, having at its lower edge a hanger-bearing *g*, a hanger formed with

separate arms *r* and *r'*, having branches *p* and *p'* extending into the bearing from opposite ends of the wall-plate and pivotally confined therein, springs *m*, confined in the bearing on the said hanger-arm branches, a divided roll-support *o o'*, extending between the free ends of the hanger-arms, and a lock comprising a recess *l* in one of the hanger-arm branches and a spring-stop *k* on the wall-plate, substantially as described.

OLIVER H. HICKS.

In presence of—
M. J. FROST,
A. P. COBB.