

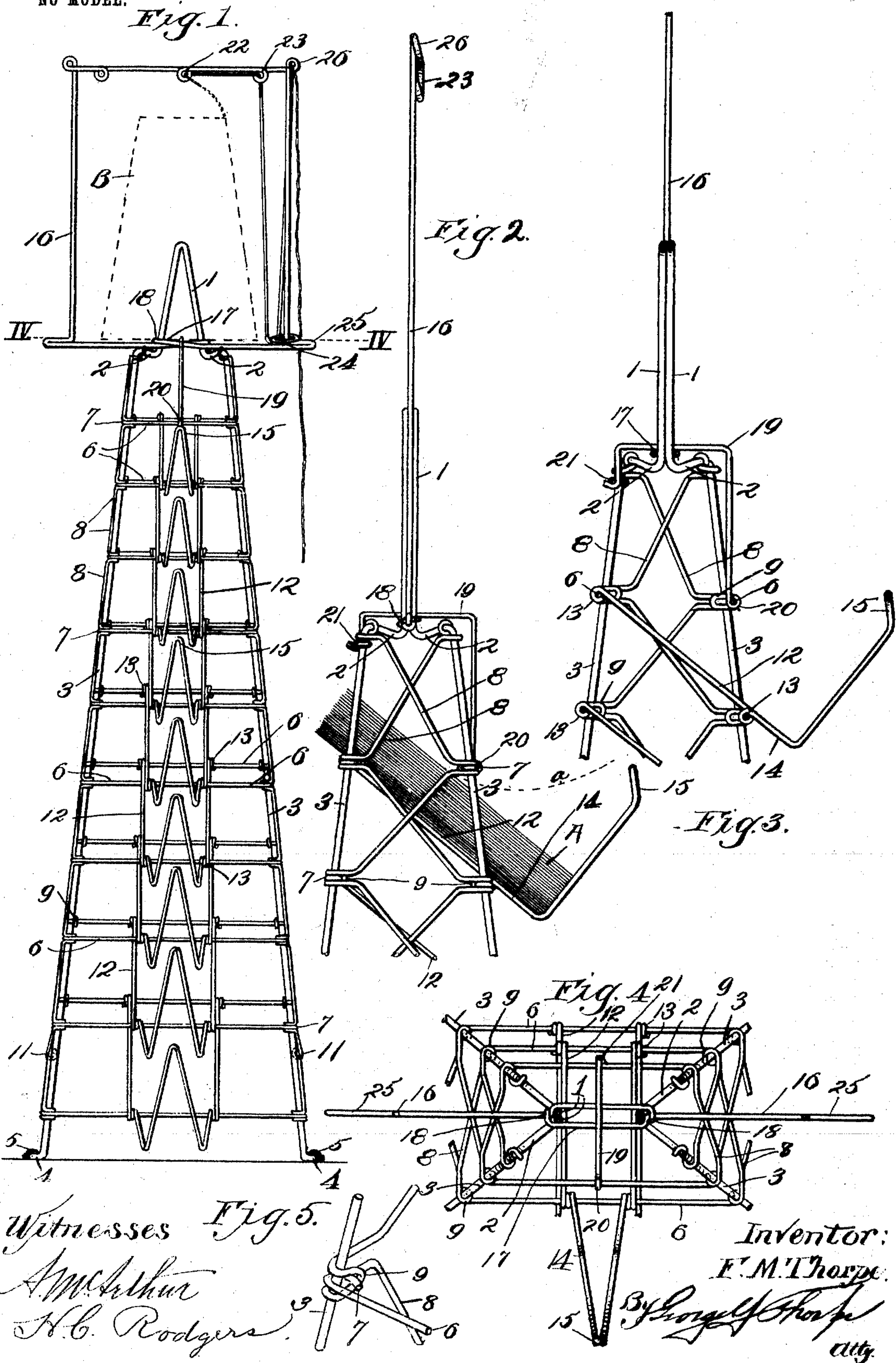
No. 767,022.

PATENTED AUG. 9, 1904.

F. M. THORPE.  
TWINE HOLDER.

APPLICATION FILED AUG. 25, 1903.

NO MODEL.





# UNITED STATES PATENT OFFICE.

FRANK M. THORPE, OF LAMAR, MISSOURI.

## TWINE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 767,022, dated August 9, 1904.

Application filed August 25, 1903. Serial No. 170,663. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK M. THORPE, a citizen of the United States, residing at Lamar, in the county of Barton and State of Missouri, have invented certain new and useful Improvements in Twine-Holders, of which the following is a specification.

This invention relates to holders for paper bags and twine, and is designed particularly as an improvement over Patent No. 713,178 on paper-bag holders, issued to me November 11, 1902, my special object in this connection being to provide a holder to be secured upon a counter and supporting a cone or ball of twine reliably and in such a manner that the loose end shall be automatically raised above the counter.

With these objects in view the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a front view of a holder for paper bags and twine embodying my invention. Fig. 2 is a side view of the upper portion of the device. Fig. 3 is a central vertical section of the upper portion of the device with the twine removed. Fig. 4 is a horizontal section on the line IV IV of Fig. 1, but showing only the extreme upper portion of the device. Fig. 5 shows a detail of construction.

In the said drawings, where like reference characters designate corresponding parts, a pair of spring-wire rods are bent to form the inverted-V-shaped portions 1. The rods are then bent outward, as at 2, and divergingly downward, as at 3, their lower ends terminating in the same horizontal plane in eyes 4, through which screws 5 extend for the purpose of securing the frames thus formed to the counter or other support. In conjunction the frames thus arranged form the outline of a tower which tapers upwardly from all sides. At intervals substantially horizontal wires 6 connect the portions 3 of each frame, the ends of said wires 6 terminating in hooks 7, which engage said portions 3. Contiguous portions 3 of the frames are connected together by

wires 8, which intersect each other, preferably as many times as there are cross-wires 6, the upper ends of said wires 8 being secured to the upper ends of portions 3 at the junction of said portions with the portions 2 by preference, while at intermediate points said wires 8 are formed with hooks 9, engaging the portions 3 above and below the cross-wires 6 and incidentally inwardly of said cross-wires, which latter thus serve to prevent the disengagement of said hooks and wires from portions 3. The lower ends of one pair of wires 8 are also hooked, as described, to the front portions 3 near their extreme lower ends, and the lower ends of the other pair of wires 8 at their points of intersection with the pair just described preferably terminate in coils 11, engaging said intersecting wires.

The frame just described constitutes a skeleton tower of extreme rigidity, strength, and lightness.

The skeleton tower above described is divided into a series of parallel and downwardly and forwardly extending compartments by means of inclined partitions 12, connected at their upper ends to the rear cross-wires 6 and also connected to the front cross-wires, occupying substantially the same horizontal planes as the rear cross-wires next below those to which said upper ends of the partitions are secured, the connections with the cross-wires being in the form of coils 13, embracing said wires. Projecting forwardly from the front coils are extensions 14, which are substantially V shape in side view and also in plan view, the upper ends of the front arms of said V-shaped portions being bent rearward slightly, so as to produce lips 15, each of which by preference projects above the inclined plane of the partition next above. It will be seen that by reason of the tapering formation of the skeleton tower the compartments are of variable width and length—that is to say, grow wider and longer from the top to the bottom of the tower in order to accommodate paper bags of different sizes, the bags arranged in bunches or loose packages being slipped down into the compartments through their open or unobstructed rear ends until ar-



rested by engagement with the upwardly-projecting arms of the V-shaped extensions, only one package A of the bags being shown in the drawings.

5 When a bag is desired, the clerk preferably grasps the lower end of the topmost bag and in one continuous movement first bends it upwardly to approximately the position shown in dotted lines *a* and then draws it forwardly  
10 over the lip, this operation being performed without disturbing or disarranging the other bags in the compartment. If desired, a number of the bags may be withdrawn in the same way, or they may be withdrawn from the rear  
15 end of the compartment if the clerk occupies a position at the time from which it is inconvenient to reach the front end, it being understood, of course, that a single bag can be quickly extracted from the front end with less  
20 danger of withdrawing or disturbing the others than it can from the rear end.

For the purpose of guiding the twine from the cone or ball B, slipped down upon the portions 1 of the tower, which portions  
25 through their resiliency reliably maintain such cone or ball in place, I provide a frame constructed as follows: A wire is bent to form a substantially rectangular frame 16, the ends terminating at the lower side of the frame in  
30 right-angle portions disposed to form a substantially rectangular loop 17, the end of the short arm of each rectangular portion being coiled, as at 18, upon the long arm of the other one. This loop fits snugly upon portions 1  
35 of the tower and below the twine cone or ball, and in order to eliminate any possibility of the accidental dislocation of said frame, and consequently of the cone or ball, a hook 19, pivoted, as at 20, on the topmost front  
40 cross-bar, extends over loop 17 and under an extra rear cross-bar 21. The top portion of the rectangular twine-guide frame is formed centrally with a loop 22, through which the twine extends from the cone or ball, and is  
45 provided near one side with a second loop 23, through which said twine passes downwardly. The twine then extends up through a sliding ring 24, fitting loosely on one side of the frame, the latter at the contiguous lower corner being formed with an extension 25 to limit the  
50 downward movement of the ring and to support it normally in a substantially horizontal position, as shown. From the ring the twine extends up through a loop 26, formed at the upper corner of the frame, from which loop  
55 it extends downwardly to within a convenient distance of the counter. In practice as a clerk grasps the twine and pulls on the same he raises the ring to the top of the frame before any of the twine is paid out from the  
60 cone or ball. After the package is tied and the twine is cut and released the ring drops to its original position, and thereby elevates the

loose end of the twine a distance equal to about twice the height of the guide-frame, so  
65 that it shall be out of the way until again needed.

From the above description it will be apparent that I have produced a holder for paper bags and twine or analogous articles which  
70 is of simple, strong, durable, cheap, light, and ornamental construction and which will perform its function efficiently and reliably, and while I have described and shown the preferred embodiment of the invention it is  
75 to be understood that I reserve the right to make such changes as properly fall within its spirit and scope.

Having thus described the invention, what I claim as new, and desire to secure by Letters  
80 Patent, is—

1. The combination of a tower, comprising a pair of wires bent to form inverted-V-shaped portions disposed vertically, outwardly-diverging arms at the lower ends of said V-  
85 shaped portions, downwardly-extending portions at the outer ends of said arms, and connections between said downwardly-extending portions, with a twine-guide frame having a loop at its lower end fitting over said inverted-  
90 V-shaped portions.

2. The combination of a tower, comprising a pair of wires bent to form inverted-V-shaped portions disposed vertically, outwardly-diverging arms at the lower ends of said V-  
95 shaped portions, downwardly-extending portions at the outer ends of said arms, and connections between said downwardly-extending portions, with a twine-guide frame having a loop at its lower end fitting over said inverted-  
100 V-shaped portions, and a catch attached to the tower and bridging the lower portion of the twine-guide frame to hold the latter in position.

3. The combination of a tower, comprising  
105 a pair of wires bent to form inverted-V-shaped portions disposed vertically, outwardly-diverging arms at the lower ends of said V-shaped portions, downwardly-extending portions at the outer ends of said arms, and connections between said downwardly-extending  
110 portions, with a twine-guide frame having a loop at its lower end fitting over said inverted-V-shaped portions, and a hook pivotally mounted on the tower and extending through  
115 the V-shaped portions and pressing down upon the loop portion of the twine-guide frame.

4. The combination of a tower, comprising a pair of wires bent to form inverted-V-shaped portions disposed vertically, outwardly-diverging arms at the lower ends of said V-  
120 shaped portions, downwardly-extending portions at the outer ends of said arms, and a cross-bar connecting a pair of said downwardly-extending portions, with the twine-  
125 guide frame having a loop at its lower end fit-

ting down over the inverted-V-shaped portions  
of the tower, and a hook pivotally mounted on  
the tower and extending through the inverted  
portions and bridging the loop of the twine-  
5 guide frame, and having the end opposite from  
its pivotal point engaging the under side of  
said cross-bar.

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

FRANK M. THORPE.

Witnesses:

H. W. STUART,  
JOHN LUTHER.