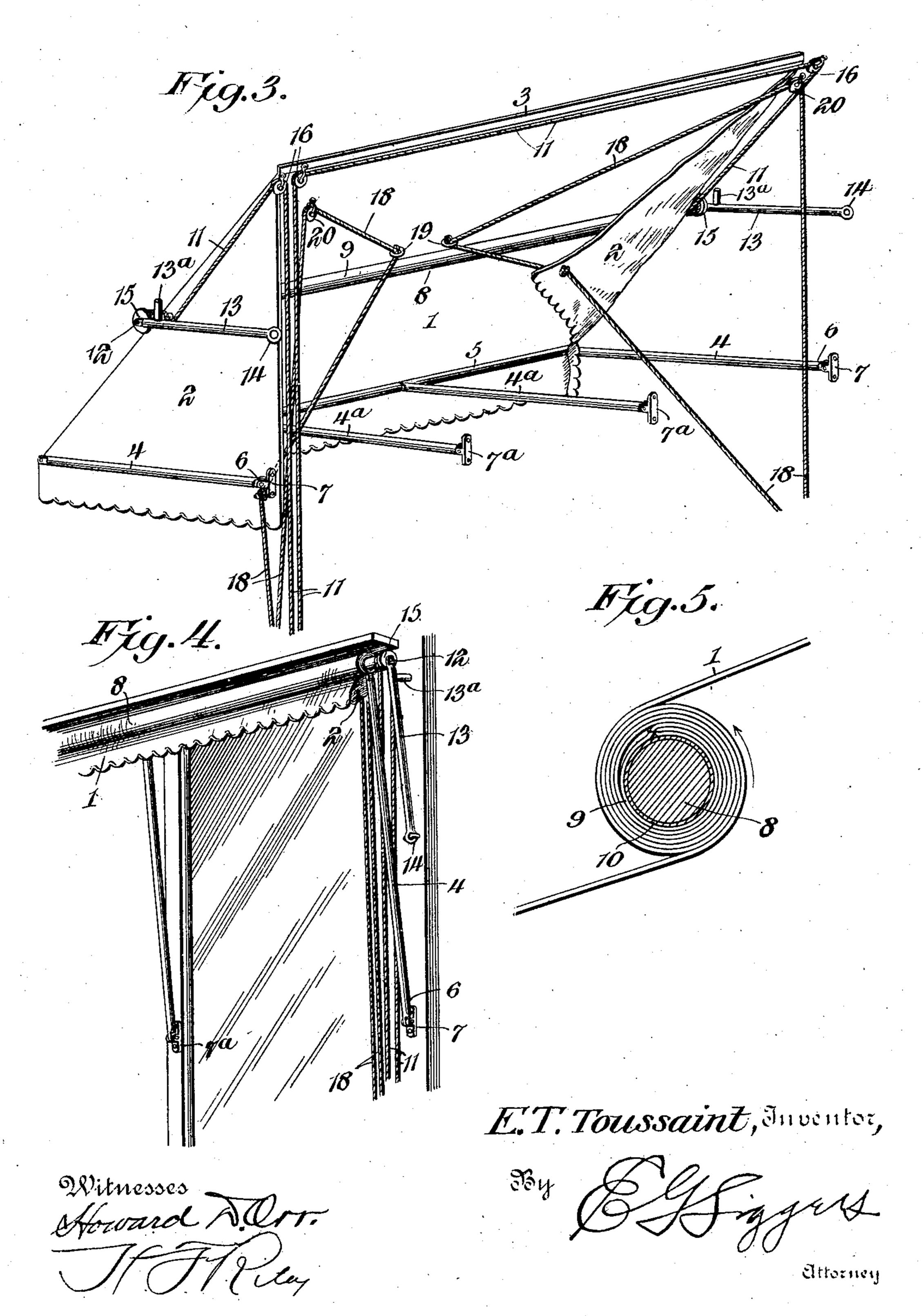
E. T. TOUSSAINT. ROLLER AWNING.

APPLICATION FILED MAR. 8, 1906. 2 SHEETS-SHEET 1. Attorney

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2 SHEETS-SHEET 2.



NE NORKIS PETERS CO., WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

EDWARD THEODORE TOUSSAINT, OF JACKSONVILLE, ILLINOIS.

ROLLER-AWNING.

No. 865,729.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed March 8, 1906. Serial No. 304,976.

To all whom it may concern:

Be it known that I, Edward Theodore Toussaint, a citizen of the United States, residing at Jacksonville, in the county of Morgan and State of Illinois, have invented a new and useful Roller-Awning, of which the following is a specification.

The invention relates to improvements in awnings.

The object of the present invention is to improve the construction of awnings, and to provide a simple, 10 inexpensive and efficient one, adapted to be rolled up more rapidly and uniformly than heretofore, and capable of being quickly unrolled.

A further object of the invention is to arrange the roller so that it will be maintained in a dry condition, and thereby prevented from warping, and another object of the invention is to arrange the roller operating ropes out of contact with the canvas, or other fabric of the awning, so that the same will not be cut or worn by the ropes when raising or lowering the awning.

Furthermore, the object of the invention is to provide a roller awning, which will possess the strength of an ordinary awning, and which may be manufactured at only a slightly increased cost.

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 the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of an awning constructed in accordance with this invention, and shown applied in position for use. Fig. 2 is a central vertical sectional view of the same. Fig. 3 is a perspective view of the awning, the same being shown detached to illustrate the arrangement of the operating ropes more clearly. Fig. 4 is a perspective view of one end of the awning, illustrating the arrangement of the parts when the awning is raised. Fig. 5 is a detail sectional view of the roller and a portion of the awning, illustrating the arrangement of the upper and lower portions of the awning with relation to the roller.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates an awning cover designed to be constructed of canvas or any other suitable fabric, and provided with foldable end curtains 2. The awning 1 is secured at its upper edge 3, similar to an ordinary awning, and it is connected with a bottom frame, consisting of a pair of hinged end braces 4, and a connecting bar 5, suitably secured to the outer ends of the end braces 4. In practice, the bottom frame will be con-

structed of tubular metal, and the inner ends 6 of the end braces 4 are pivoted to brackets 7, whereby the braces 4 are adapted to swing upward and downward as the awning is rolled up and unrolled, as hereinafter 60 explained. The frame is also provided at suitable intervals with intermediate braces 4^a, which are pivoted or hinged at their outer ends to the bar 5, and at their inner ends to suitable brackets 7^a.

The awning cover 1, which is continuous from its up- 65 per attached edges to the bottom frame is provided at an intermediate point with a roller 8, preferably arranged at the center and located beneath the awning 1, and housed within a fold or casing 9, of the fabric of which the awning is constructed. The roller 8 divides 70 the awning into upper and lower portions, and when the roller is rotated the upper and lower portions of the awning will be simultaneously wound around the roller or unwound therefrom, according to the direction in which the roller is rotated. The roller is preferably 75 constructed of wood, and is provided with a sheetmetal covering 10, which protects the wood and prevents the roller from warping. The ends of the roller are extended beyond the awning to receive operating ropes 11, and they are also provided with projecting 80 journals or pivots 12, which pass through the outer ends of hinged braces 13, which swing upward and downward as the awning is raised and lowered. The inner ends 14 of the braces 13 are suitably hinged to the front of the store or other building to which the awning is applied. 85 The ends of the roller are also provided with projecting flanges 15, for retaining the operating ropes on the ends of the roller.

The operating ropes 11 extend upward from the roller to top guides 16, which are preferably in the form 90 of pulleys, and when the awning is down, the outer portions of the operating ropes are wound around the extended ends of the roller, whereby when the operating ropes are pulled upon, the roller will be rotated by the unwinding of the operating ropes and will simultane- 95 ously wind around it, the upper and lower portions of the awning. As the roller is arranged at the center of the awning, it will be apparent that the awning may be wound up in about one-half the time requried for winding an awning with the roller at either the top or 100 bottom of the same. Cleats 17, or other suitable means, are provided for securing the ends of the operating ropes. The end of one of the operating ropes extends along the top of the awning in the usual manner, so that both operating ropes may be fastened with one 105 cleat and may be operated at one end of the awning.

The hinged braces 13 are provided adjacent to their outer ends with projections 13^a, extending upwardly from the braces 13 when the awning is down, as illustrated in Fig. 1 of the drawings, and adapted, when 110 the awning is raised, as shown in Fig. 4, to abut against the supporting framework and offset the roller from the

pulley 16 and from the building sufficiently to permit the roller to rotate freely. This will prevent the roller from binding and will enable the awning to be rolled up tightly even after the hinged braces have reached the limit of their upward movement.

The end curtains are wound up simultaneously with the awning, and are foldable against the inner or lower face of the same, as indicated in Fig. 3 of the drawings. Suitable operating cords or ropes 18 are connected with 10 the end curtains and pass through guides 19 and 20, located respectively at points adjacent to the center of the awning, and at the ends of the top thereof. The terminals of each operating cord or rope 18 are secured to the end curtain at the bottom thereof, adjacent to the rear edge of the same, and two branches are thus provided, one being adapted to draw the end curtain upwardly against the inner or lower face of the awning, and the other being arranged to swing the end curtain downward in position for use.

The operating ropes 18 control the end curtains and enable the same to be swung upwardly and downwardly, and when the said operating ropes 18 are fastened to the cleats 17, as illustrated in Fig. 1 of the drawings, the downwardly extending branches will retain the end curtains in a vertical position at the ends of the awning.

The awning, by being attached at the top and supported at the bottom by a frame, possesses all the strength of an ordinary awning, and the roller does not greatly increase the cost of the awning. By arranging the roller in the position shown, the awning is adapted to shed water at all times, and the intermediate position of the roller enables the awning to be raised and lowered in much less time than an ordinary awning.

The braces 13 swing upward and downward with the roller, and the roller automatically lowers the awning when the operating ropes are released.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent,

1. The combination of a substantially continuous awning cover, a bottom frame connected with the bottom of the awning cover, a roller arranged at an intermediate point between the upper edge of the awning cover and the bottom frame and dividing the said awning cover into upper and lower portions, and operating ropes connected with the roller for simultaneously winding the upper and lower portions of the awning cover on the roller.

2. The combination of a substantially continuous awn-

bottom frame connected with the bottom of the awning cover, a roller arranged in the said loop and located at an intermediate point between the upper edge of the awning cover and the bottom frame and dividing the said awning cover into upper and lower portions, and operating means for rotating the roller for simultaneously winding the upper and lower portions of the awning cover on the said roller.

3. The combination of an awning cover provided at its inner or lower face with a loop located at an intermediate 60 point between the top and bottom of the awning cover, a roller arranged within the loop, a bottom frame connected with the bottom of the awning, and operating ropes for rotating the roller.

4. The combination of an awning cover, a hinged bottom frame connected with the bottom of the awning cover and provided with braces, a roller connected with the awning cover and located at an intermediate point between the top and bottom thereof and dividing the said awning cover into upper and lower portions, hinged braces connected with the roller, and means for rotating the roller for simultaneously winding the upper and lower portions of the awning cover on the roller.

5. The combination of an awning cover provided with foldable curtains, a bottom frame connected with the awning cover, an intermediate roller also connected with the awning cover and located between the top and bottom thereof, means for rotating the roller, guides located at the top of the awning cover at points between the top and bottom thereof, and operating ropes secured to the end curtains and having upwardly and downwardly extending branches, the upwardly extending branches passing through the said guides and adapted to fold the end curtains against the inner face of the awning cover for enabling the same to be wound up simultaneously with the \$5 said awning cover.

6. The combination of an awning cover, a hinged frame connected with the bottom of the awning cover, a roller connected with the awning cover and located at an intermediate point between the top and bottom thereof and 90 dividing the awning cover into upper and lower portions, hinged braces connected with the roller, and means for rotating the roller for simultaneously winding the upper and lower portions of the cover on the rollers.

7. An awning provided at an intermediate point with a 95 roller, a hinged brace connected with the roller, an operating rope connected with the roller for rotating the same and for swinging the hinged brace upwardly, guiding means for the operating rope, and a stop projecting from the brace for limiting the upward movement of the brace to 100 offset the roller and permit the same to rotate freely.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD THEODORE TOUSSAINT.

Witnesses:

Louis Toussaint, John H. Russel.