

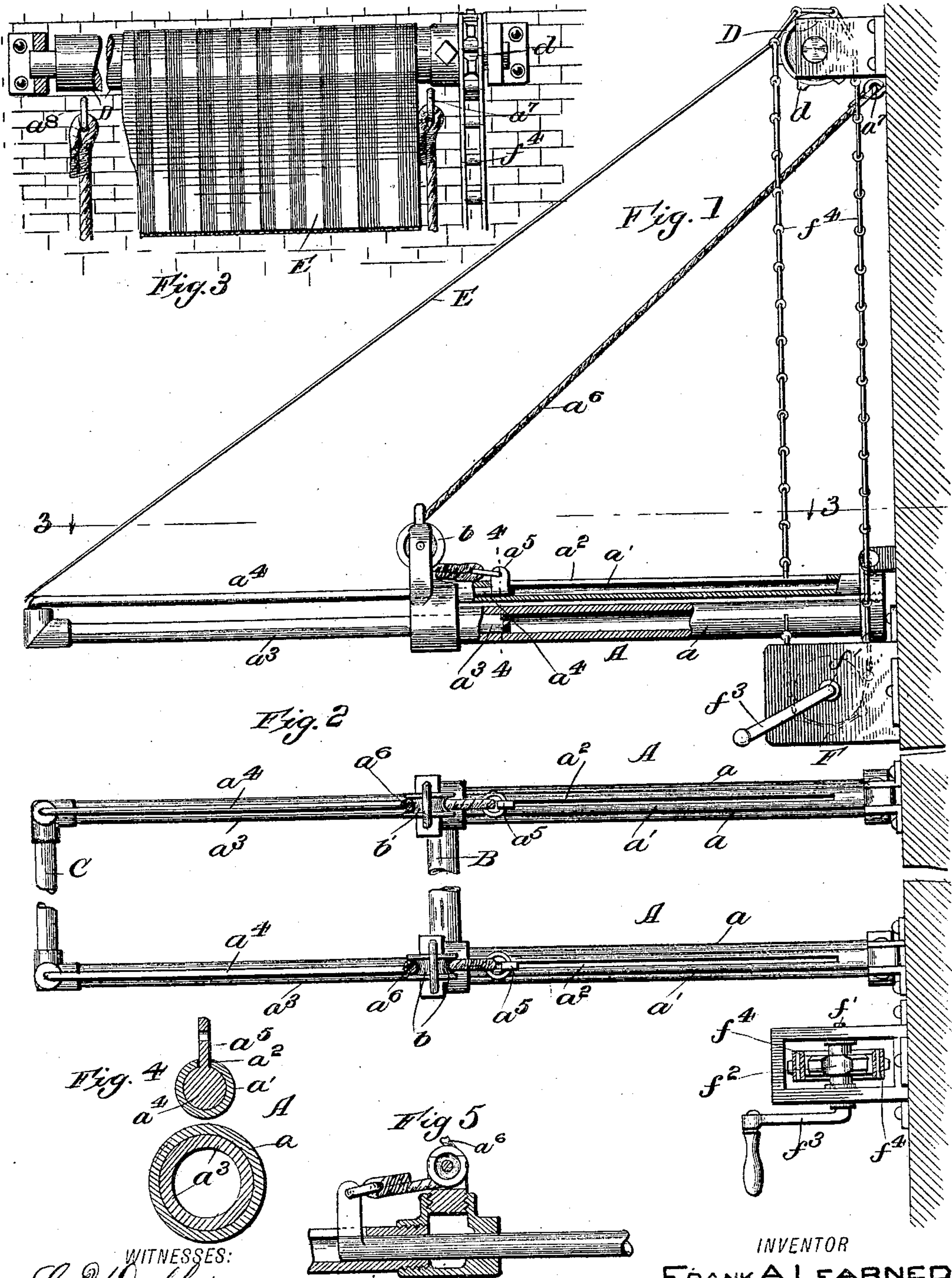
No. 820,214.

PATENTED MAY 8, 1906.

F. A. LEARNED.

AWNING.

APPLICATION FILED JUNE 13, 1905.



WITNESSES:
C. E. Ruffey
C. E. Trainor

INVENTOR
FRANK A. LEARNED
BY *Wm. H. Co.*
ATTORNEYS

UNITED STATES PATENT OFFICE.

FRANK ALANZO LEARNED, OF CHICAGO, ILLINOIS.

AWNING.

No. 820,214.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed June 13, 1905. Serial No. 265,040.

To all whom it may concern:

Be it known that I, FRANK ALANZO LEARNED, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have made certain new and useful Improvements in Awnings, of which the following is a specification.

My invention is an improvement in awnings; and it consists in certain novel constructions and combinations of parts hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my invention. Fig. 2 is a horizontal section on the line 3 3 of Fig. 1. Fig. 3 is a front view of the winding-roller and adjacent parts. Fig. 4 is a vertical section on the line 4 4 of Fig. 1, and Fig. 5 is a detail of a form of awning of lighter construction provided with single-tube side arms.

In the practical application of my invention I provide a frame comprising side arms A, each composed of a tube a of relatively large diameter, adapted to be hinged to the wall of a building, and a tube a' of relatively small diameter, supported upon the large tube and provided with a longitudinal slot a^2 . A cross-bar B connects the free ends of the side arms, and upon the ends of the cross-bar are arranged the pulleys b b' . Rods a^3 are arranged to slide within the tubes of relatively large diameter, and rods a^4 , provided with the lugs a^5 for engaging the slots, are arranged to slide within the tubes of relatively small diameter, the free ends of the rods of the respective pairs being joined together and the respective pairs connected together by the cross-bars C. A winding-roller D is journaled upon the wall of the building above the side bars A, and one of the ends thereof is provided with a sprocket-wheel d .

A bearing F is secured to the building within convenient reaching distance from the pavement, and journaled in the bearing is a shaft f' , bearing a sprocket-wheel f^2 and provided without the bearing with a crank f^3 , a sprocket-chain f^4 passing over the sprocket-wheel f^2 and the sprocket-wheel d on the winding-roller.

Ropes a^6 extend from the lugs a^5 over the pulleys b b' and are secured to the eyes a^7 a^8 , attached to the building below the winding-roller. The usual awning-cloth E is secured to the winding-roller and extends downwardly to the outer cross-bar C, to which it is secured in any suitable manner.

In operation the winding-roller is rotated

by means of the crank and sprocket-chain, winding up the awning-cloth and elevating the side arms. The tension of the awning-cloth tends to force inward the sliding rods, this movement being allowed by the relaxation of the ropes a^6 . When the awning-cloth is completely wound up, the sliding rods are within the tubes. When the awning is lowered, the tension of the ropes a^6 forces the sliding rods outwardly from the tubes, thus extending the side arms.

In Fig. 5 I have shown a form of side bar adapted for window-awnings or awnings of a similar character. In this construction the tube of relatively small diameter and the sliding rod therein are dispensed with, the larger tube being slotted and the rod therein provided with the lug. The frame is otherwise similar in all respects to that shown in Fig. 1.

It will be evident from the description that my improved awning, although simple in construction, is yet efficient in operation and will not easily get out of order. The action of the ropes in extending the side arms is positive and is not dependent upon springs or weights, thus insuring always a proper extension of the arms.

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

1. In an awning the combination of side arms, comprising each a tube of relatively large diameter adapted to be hinged to a building, and a longitudinally-slotted tube of relatively small diameter supported on the first tube, a cross-bar connecting the outer ends of the side arms, pulleys at the ends of the cross-bar, rods sliding in the respective tubes of the side arms, the rods in the tubes of relatively small diameter being provided with lugs for engaging the slots, a cross-bar connecting the free ends of the rods, a winding-roller journaled above the side arms and provided with a sprocket-wheel, ropes secured to the lugs and passing over the pulleys and secured at points below the winding-roller, an awning extending from the winding-roller to the outer cross-bar and means engaging the sprocket-wheel for actuating the winding-roller.

2. In an awning, the combination of side arms, comprising each a longitudinally-slotted tube adapted to be hinged to a building, and rods sliding in the tubes and provided with lugs for engaging the slots, a cross-bar

connecting the outer ends of the tubes, a cross-bar connecting the free ends of the rods, a flexible strand secured to the lugs and adapted to be engaged with a building, a winding-roller journaled above the side arms and provided with a sprocket-wheel, an awning extending over the winding-roller to the outer cross-bar, and means engaging the sprocket-wheel for actuating the winding-roller.

3. In an awning, the combination of a frame provided with extensible side arms, each comprising a longitudinally-slotted tube adapted to be hinged to a building, and a rod sliding in the tube and provided with a lug for engaging the slot, a cross-bar connecting the ends of the tubes, a cross-bar connecting the ends of the rods, pulleys journaled in the ends of the first cross-bar, ropes secured to the lugs and passing over the pulleys and secured at points above the side arms, whereby

when the frame is lowered the side arms may be extended.

4. In an awning the combination of a frame comprising extensible side arms adapted to be hinged to a building each of the side arms comprising a longitudinally-slotted tube, and rods sliding in the tubes and provided with lugs for engaging the slots, a cross-bar connecting the ends of the tubes, a cross-bar connecting the free ends of the rods, pulleys on the ends of the first cross-bar, and a rope secured to the lugs, passing over the pulleys and secured at points above the side arms whereby when the frame is lowered the side arms may be extended.

FRANK ALANZO LEARNED.

Witnesses:

JOHN JOSEPH CONDON,
RICHARD E. WINTER.