

No. 648,444.

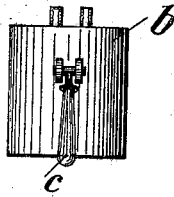
H. SÖRENSEN.  
UMBRELLA SUPPORT.  
(Application filed Sept. 7, 1899.)

Patented May 1, 1900.

(No Model.)

*Fig. 3.*

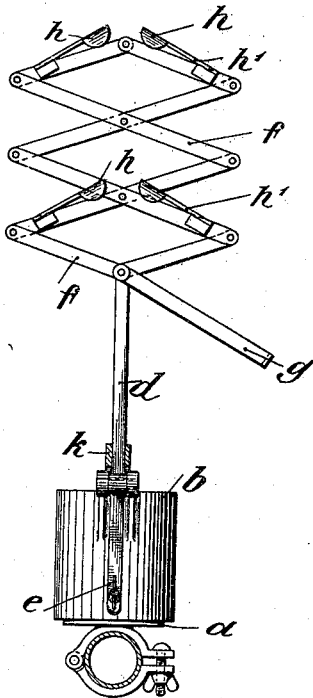
*Fig. 4.*



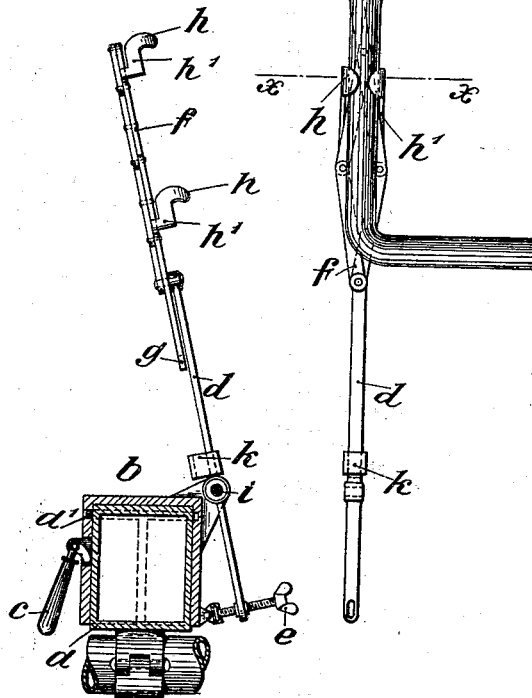
*Fig. 5.*



*Fig. 1.*



*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

HEINRICH SÖRENSEN, OF WANDSBECK, GERMANY.

## UMBRELLA-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 648,444, dated May 1, 1900.

Application filed September 7, 1899. Serial No. 729,768. (No model.)

*To all whom it may concern:*

Be it known that I, HEINRICH SÖRENSEN, master baker, a subject of the King of Prussia, German Emperor, residing at Wandsbeck, Sternstrasse 51, in the Kingdom of Prussia and Empire of Germany, have invented certain new and useful Improvements in Umbrella or Sunshade Attachments for Cycles, of which the following is a full, clear, and exact description.

The subject of this invention is an attachment for cycles whereby to enable an open umbrella or sunshade to be carried in any desired position relative to the rider, the essential feature of the invention comprising means by which the umbrella is steadied by a firm grasp of the stick being obtained throughout the greater part of its length, such means being combined with provision for adjusting and securing the umbrella at such an angle and in such a direction as may be required by meteorological or other conditions.

Reference is to be had to the accompanying drawings, forming part of this specification, wherein—

Figure 1 is a view of the appliance when not in use. Fig. 2 is a similar view in a plane at right angles to that of Fig. 1, a part of the attachment being shown in section. Fig. 3 shows the means of gripping the umbrella-stick as applied to the same. Fig. 4 shows a detail; and Fig. 5 is a section on line *x x*, Fig. 3.

Similar letters of reference denote like parts in all the figures.

A is a screw-clamp adapted to be fixed to the frame or handle-bar of the cycle and carrying an upright cylindrical bearing *a*, upon which the tubular socket *b* may be rotated, so as to be brought to any required angular position, an eccentric cam, to which the handle *c* is attached, serving to jam the socket on its bearing when the requisite adjustment has been made.

*a'* is a spring-catch attached to *a* and engaging in an annular groove on the internal surface of the socket *b* to prevent the latter being lifted off its bearing—as, for example, by wind getting under the umbrella. A rod *d* (normally upright, or nearly so) is pivotally attached to the socket *b* at the point *i*, so as to be capable of movement in the plane of

the axis of the socket *b*, the inclination of rod *d* to said axis being determined by the adjustment of a thumb-screw *e*, pivoted to the socket *b*, and having a nut engaging with a slot in the lower end of the rod. To the upper end of the rod *d* is pivoted the bottom joint of a lazy-tongs *f*, provided upon its upper and lower pairs of bars, respectively, with pairs of oppositely-inclined spring-arms *h'*, whose inwardly-directed concave ends *h*, Fig. 5, form jaws adapted to grip the umbrella-stick when the lazy-tongs, being extended in the upward direction, are collapsed laterally, as shown in Fig. 3. This upward extension of the lazy-tongs is effected by the depression of the lever-arm *g*, forming a continuation of one of the bottom links of the tongs, the bar *g* being locked in a position overlying and parallel to the rod *d* (and thus serving both to maintain a firm grip of the umbrella-stick and to hold the lazy-tongs and stick in a more or less upright position) by means of the sliding collar *k*, which for this purpose is pushed upward on rod *d* until it engages with the lower end of lever *g*. The amount of lateral compression of the lazy-tongs *f* is thus constant, the spring-arms *h'* yielding sufficiently to accommodate sticks of different diameters. The lazy-tongs are of such proportions as, when extended, to cause the jaws *h* to grip the umbrella-stick at two points in its length a considerable distance apart, and so to afford a secure support for the umbrella under the varying conditions of wind, &c., the tongs when out of use being capable of being depressed and collapsed into a small compass.

It will be obvious that by means of the adjustments provided by the clamp A, the cylindrical bearing and socket *a b*, and the pivot-joint *i* the umbrella when supported by the tongs *f* can be readily fixed in any desired position relative to the rider of the cycle.

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

1. An attachment for a cycle adapted to support an open umbrella or sunshade in any desired position relative to the rider, consisting of a lazy-tongs having pairs of spring-arms provided with jaws adapted, when the tongs are locked in the extended position, to grasp the stick of the umbrella, said lazy-

tongs being mounted upon a rod adjustably pivoted to a support capable of angular adjustment in a plane perpendicular to that of the last-mentioned adjustment, said support  
 5 being mounted upon a clamping device whereby the entire apparatus may be fixed to the frame or handle-bar of the cycle, substantially as specified.

2. In a cycle attachment adapted to support an open umbrella or sunshade in any desired position relative to the rider consisting of a lazy-tongs mounted on a rod adjustably pivoted to a support fixed to the handle-bar or frame of the cycle and having two or more  
 15 pairs of oppositely-inclined spring-arms with terminal jaws adapted when the lazy-tongs are extended to bear against opposite sides of the umbrella-stick at two or more points in the length of the latter, means for locking  
 20 the lazy-tongs in the extended position and at the same time insuring a secure grip of the umbrella-stick consisting of a lever-arm forming an extension of one of the links of the lazy-tongs and a collar adapted to slide  
 25 upon the rod supporting the lazy-tongs and to engage with said lever-arm so as to hold the latter fixed relatively to said rod substantially as specified.

3. In a cycle attachment adapted to support an open umbrella or sunshade in any desired position relative to the rider consisting of a lazy-tongs mounted on a rod adjustably pivoted to a support fixed to the handle-bar or frame of the cycle and having two or more  
 35 pairs of oppositely-inclined spring-arms with terminal jaws adapted when the lazy-tongs are extended to bear against opposite sides

of the umbrella-stick at two or more points in the length of the latter, means for locking the lazy-tongs in the extended position and  
 40 at the same time insuring a secure grip of the umbrella-stick consisting of a lever-arm forming an extension of one of the links of the lazy-tongs and a collar adapted to slide  
 45 upon the rod supporting the lazy-tongs and to engage with said lever-arm so as to hold the latter fixed relatively to said rod, and a set-screw pivoted to the support and screwing through a nut in the arm and serving to enable the inclination of the attachment to  
 50 be adjusted as required substantially as specified.

4. The combination in a cycle attachment for supporting an open umbrella or sunshade consisting of lazy-tongs provided with spring-  
 55 arms adapted to grip the stick of the umbrella or sunshade mounted on a rod capable of being adjusted to any inclination desired and provided with means for locking it in position, of a support consisting of a cylindrical  
 60 bearing provided with a clamp for securing it to the cycle handle-bar, a tubular cylindrical socket rotating on the bearing, a cam for securing the socket to the bearing, and a  
 65 spring-catch to prevent the socket being accidentally lifted off the bearing substantially as specified.

In witness whereof I subscribe my signature in presence of two witnesses.

HEINRICH SÖRENSEN.

Witnesses:

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 W. N. GOLDSCHMIDT.