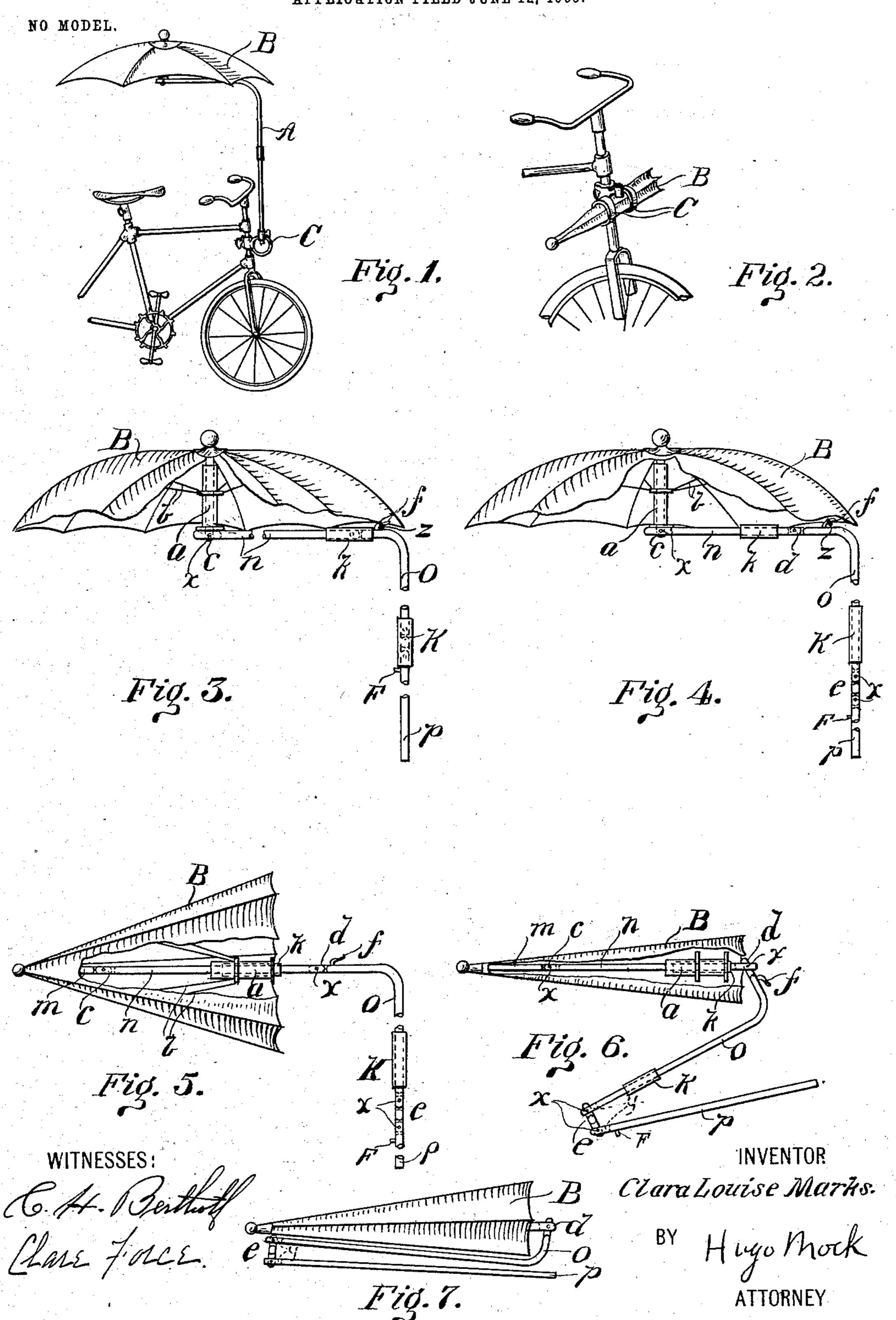
C. L. MARKS. COLLAPSIBLE UMBRELLA. APPLICATION FILED JUNE 12, 1903.



United States Patent Office.

CLARA LOUISE MARKS, OF STAMFORD, CONNECTICUT.

COLLAPSIBLE UMBRELLA.

SPECIFICATION forming part of Letters Patent No. 749,310, dated January 12, 1904.

Application filed June 12, 1903. Serial No. 161,203. (No model.)

To all whom it may concern:

Be it known that I, CLARA LOUISE MARKS, a citizen of Germany, residing at Stamford, in the county of Fairfield and State of Connecticut, have invented a new and useful Collapsible Umbrella, of which the following is a specification.

My invention relates more especially to that class of umbrellas ordinarily used on bicycles and baby-carriages and attached thereto and not carried in the hand, although I do not restrict myself to the aforementioned type.

The object of my invention is to provide an umbrella capable of convenient attachment to a bicycle or baby-carriage and which may be folded in compact shape when closed and carried on such bicycle or other vehicle.

My umbrella is constructed as illustrated in the accompanying drawings, in which—

Figure 1 is a general perspective view of the umbrella when open and in use. Fig. 2 is a general perspective view of the umbrella when closed. Fig. 3 is a vertical detailed section of the umbrella open. Fig. 4 is a vertical detailed section of the umbrella open, giving also a sectional view of the joints by which the umbrella is operated. Fig. 5 is a detailed side elevation of the umbrella partly closed. Fig. 6 is a detailed side elevation of the whole umbrella partly closed. Fig. 7 is a side elevation of the umbrella completely folded.

The manner of construction of my umbrella is as follows: The rod A, preferably of metal, consists of the sections m, n, o, and p, united 35 by the joints c d and the link e, respectively. When the umbrella is open and in use, section m is covered by the runner of the umbrella a and is held in an upright position by the stretchers b b, as shown in Fig. 3. Sec-40 tion m is joined to section n by the joint c, moving on the pivot x. This joint c is made by cutting the rod A vertically for a short distance in the middle, sawing the rod transversely for half its diameter at each and op-45 posite ends of said cut, and joining the two parts by the pivot x. Joint d is made in a similar manner. The force of the stretchers b b will hold section m in place when the umbrella is open; but to hold the sections n and 50 o together I utilize the sleeve K, held in position by the curved pin f, which also acts as a fastener for the cover B when the umbrella

is open by means of the loop z. Sections o and p are joined by the link e and held in place when the umbrella is open by the sleeve 55 K, supported by the pin F. The link e is made by taking a small section of rod of the same diameter as rod A, reducing each end of said rod to fit into cavities made in the ends of sections o and p, respectively, and 60 joining said parts by means of the pivots x x.

To use my umbrella, starting from the collapsed position shown in Fig. 7, section p is brought into line with section o and the sleeve K is slipped on. Sections n and o are simi- 65larly joined, and to prevent the motion of the umbrella-cover when the umbrella is open and in use a loop z, attached to said cover, is fastened to the pin f. The runner a is then pushed up as far as possible past the joint c, 7° when the section m may be turned perpendicularly to section n, and the umbrella-cover is held firmly upright and in place by the stretchers b b. To close the umbrella, a reverse operation is performed. When open 75 the umbrella is held in position on the bicycle or other vehicle by the holder C; but I do not restrict myself to any particular form of holder for the umbrella, either closed or open.

My umbrella forms a convenient and compact umbrella for bicycles, baby-carriages, and similar vehicles where lightness and economy of space are desirable.

I prefer to make the umbrella-cover as flattened in shape as possible, so as to offer as 85 little resistance to the wind as possible; but I do not claim this as an essential feature of my invention.

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

In an umbrella, the combination of an umbrella-rod, of a joint uniting two sections of said rod, of a sleeve adapted to hold said joint in position and of a pin adapted to hold said sleeve in position and also adapted to hold the 95 cover of said umbrella firmly in position when open.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLARA LOUISE MARKS.

Witnesses:

HENRY POHEL, ETHEL G. KALLER.