

(No Model.)

2 Sheets—Sheet 1.

G. H. COFFIN.
UMBRELLA ATTACHMENT FOR CYCLES.

No. 497,068.

Patented May 9, 1893.

Fig. 1.

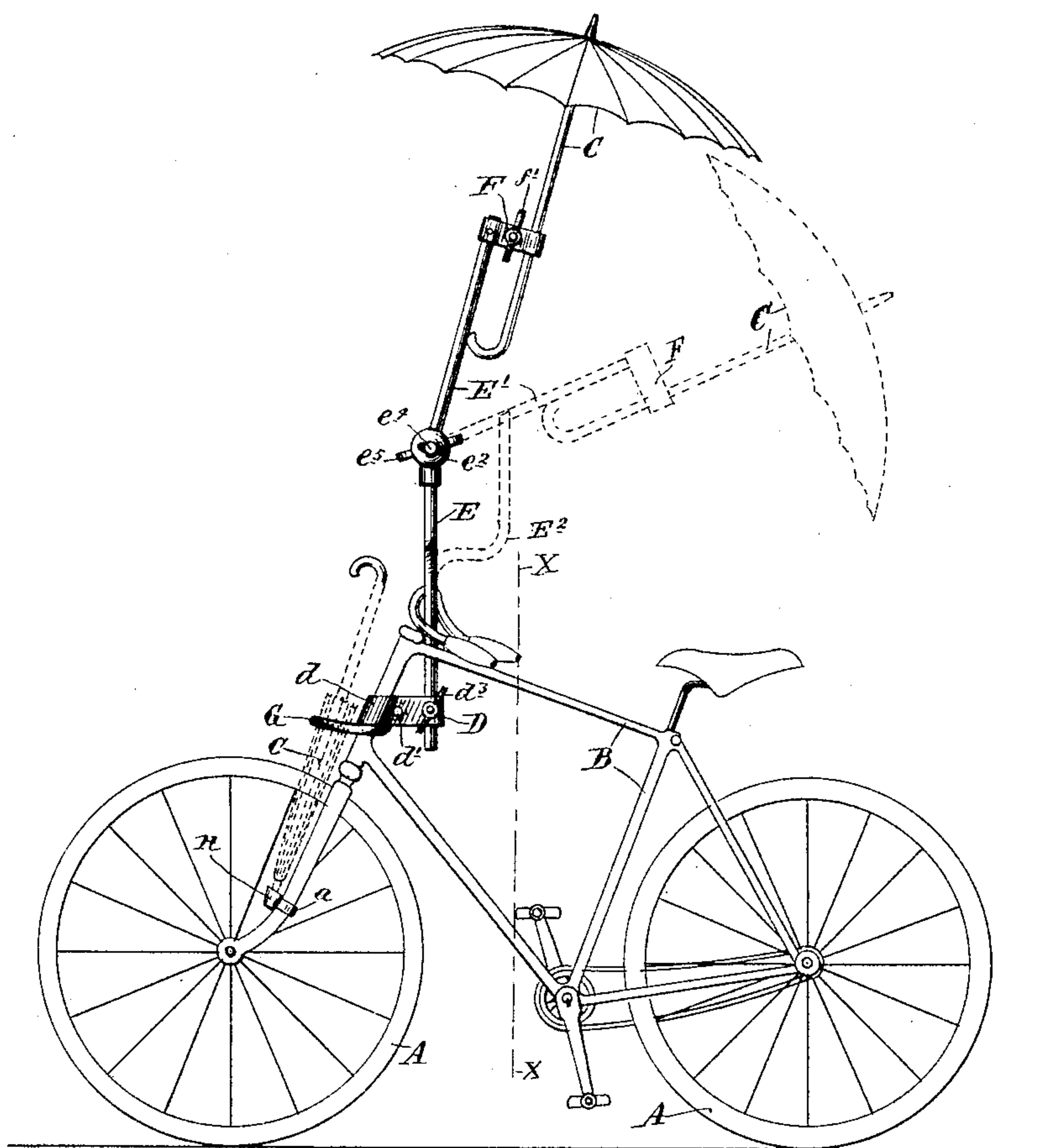
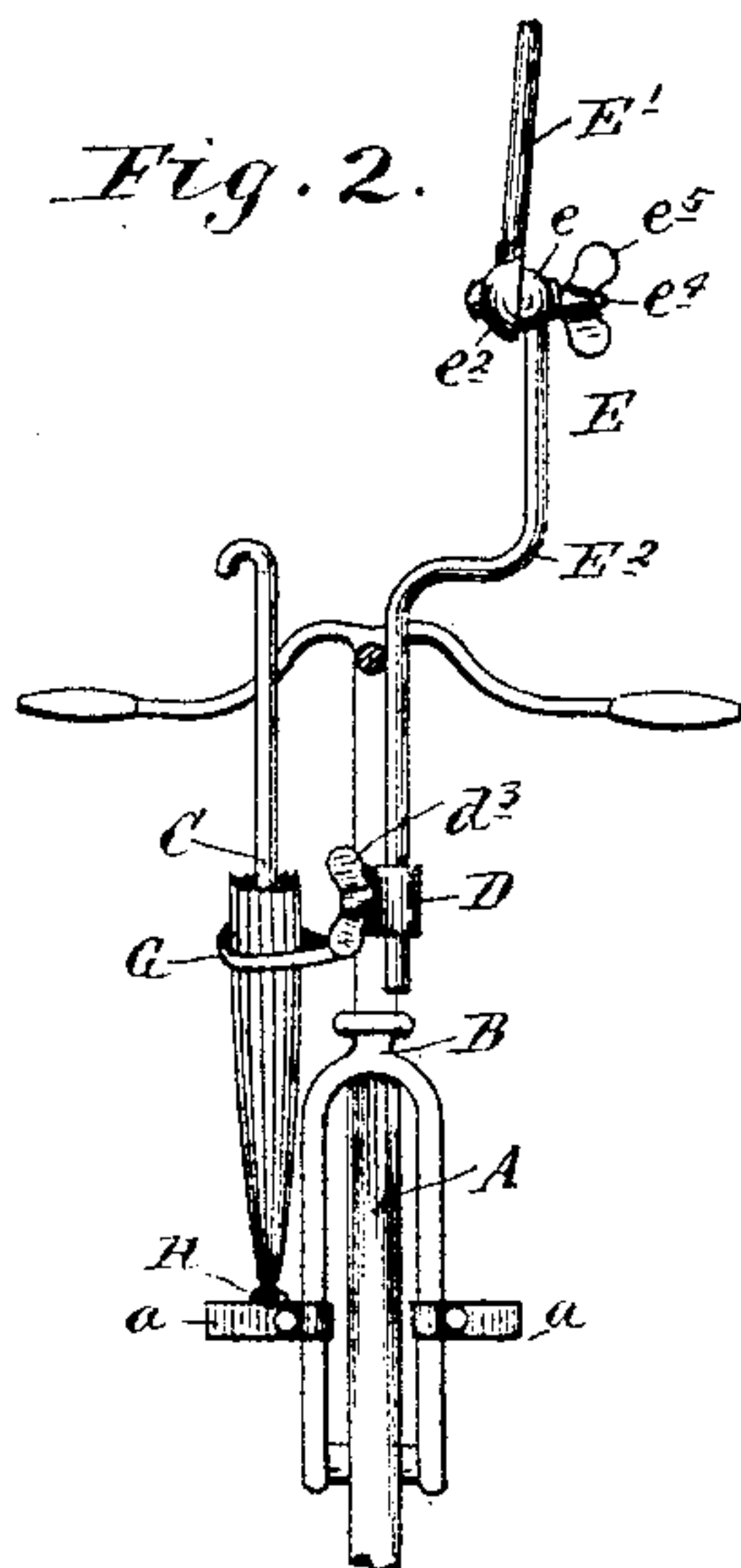


Fig. 2.



Witnesses.
A. H. Cpsahl.
Bank Merchant

Inventor.
George H. Coffin
By his Attorney.
Jas. F. Williamson

G. H. COFFIN.
UMBRELLA ATTACHMENT FOR CYCLES.

No. 497,068.

Patented May 9, 1893.

Fig. 3.

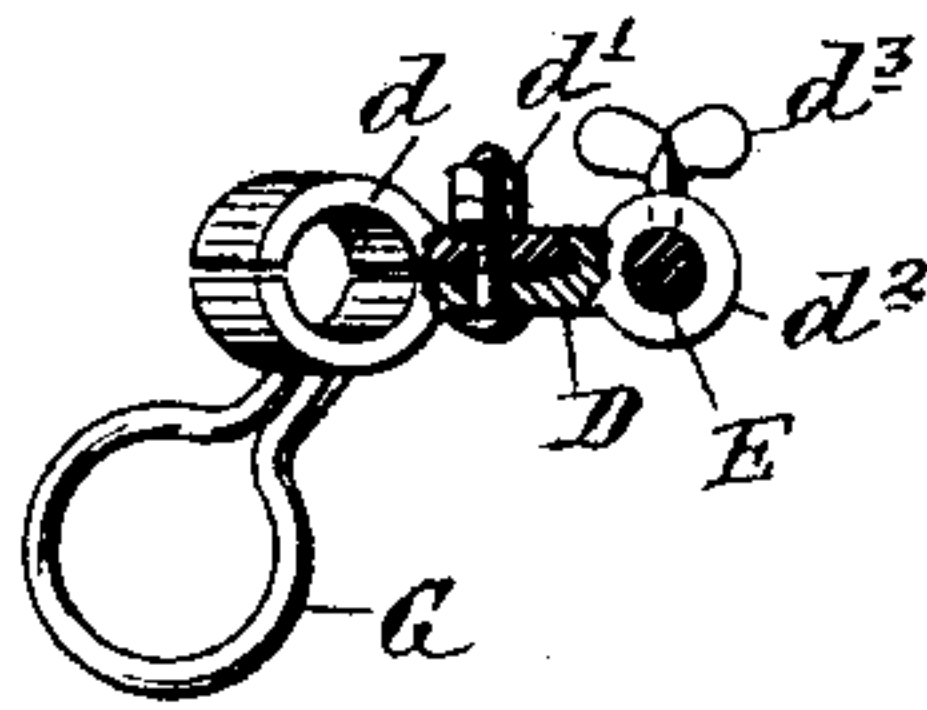


Fig. 4.

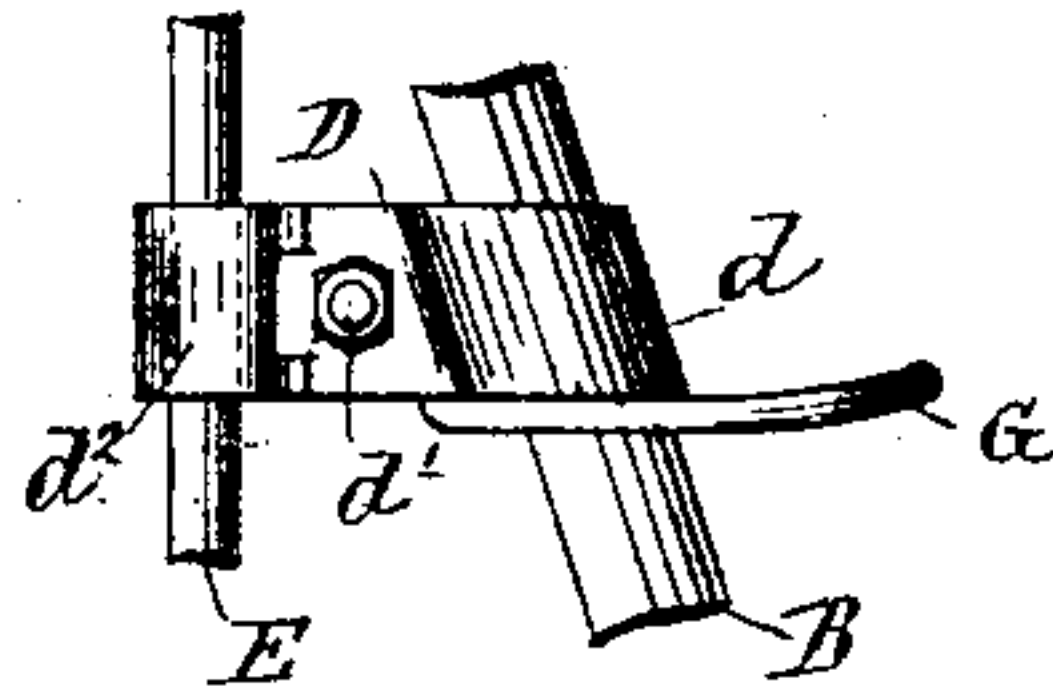


Fig. 5.

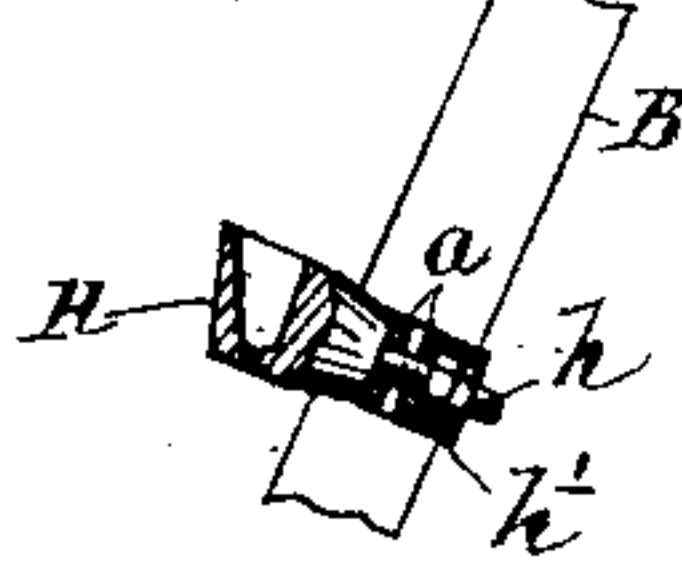


Fig. 6.

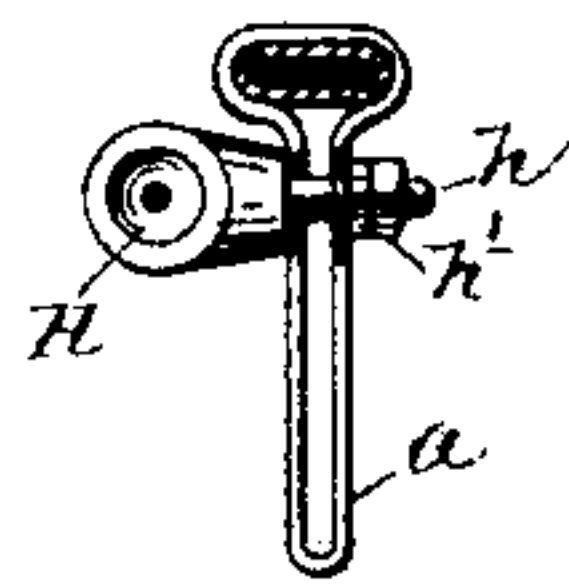


Fig. 8.



Fig. 7.

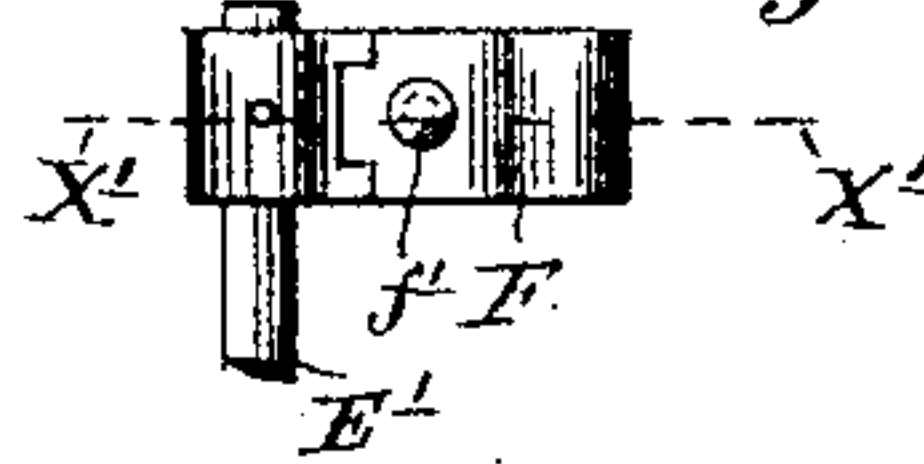


Fig. 9.

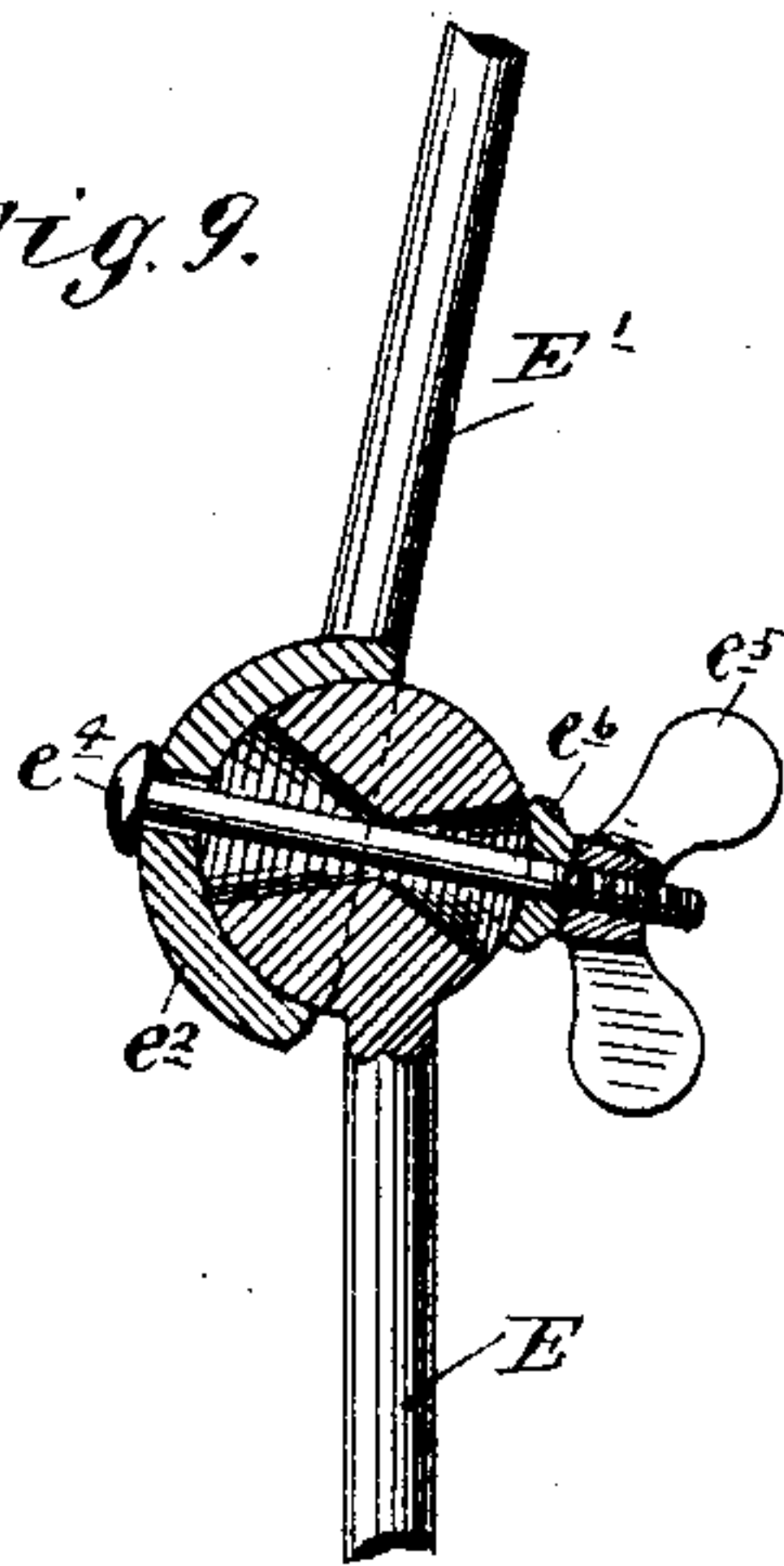


Fig. 11.

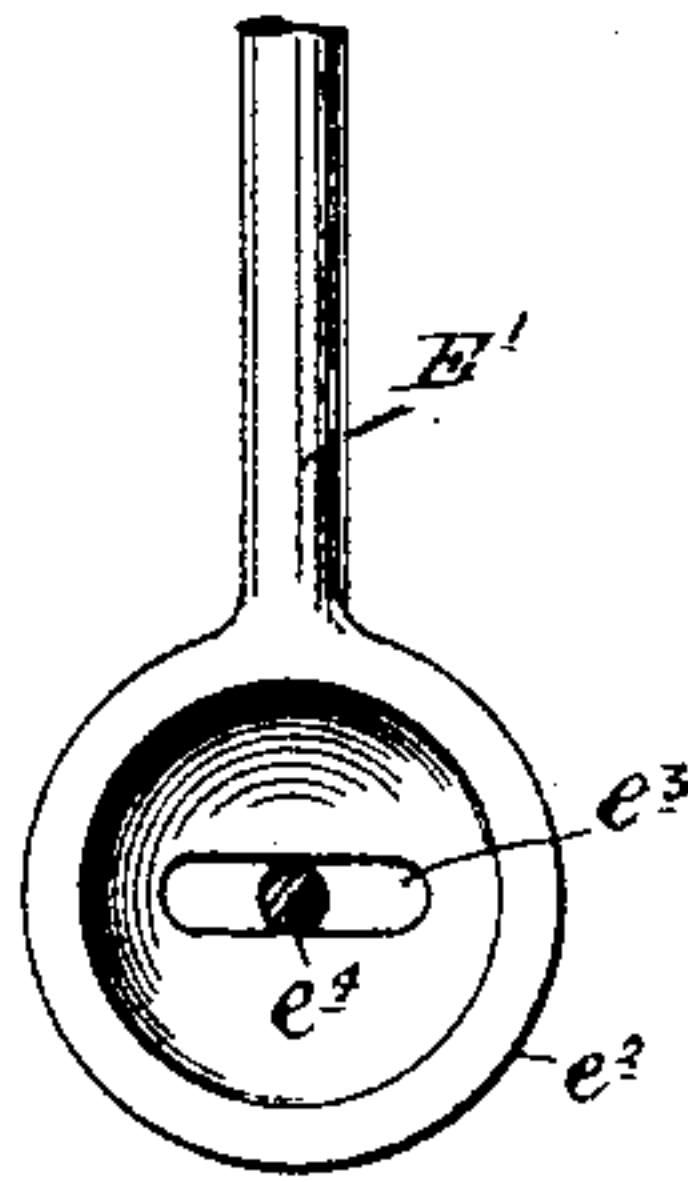
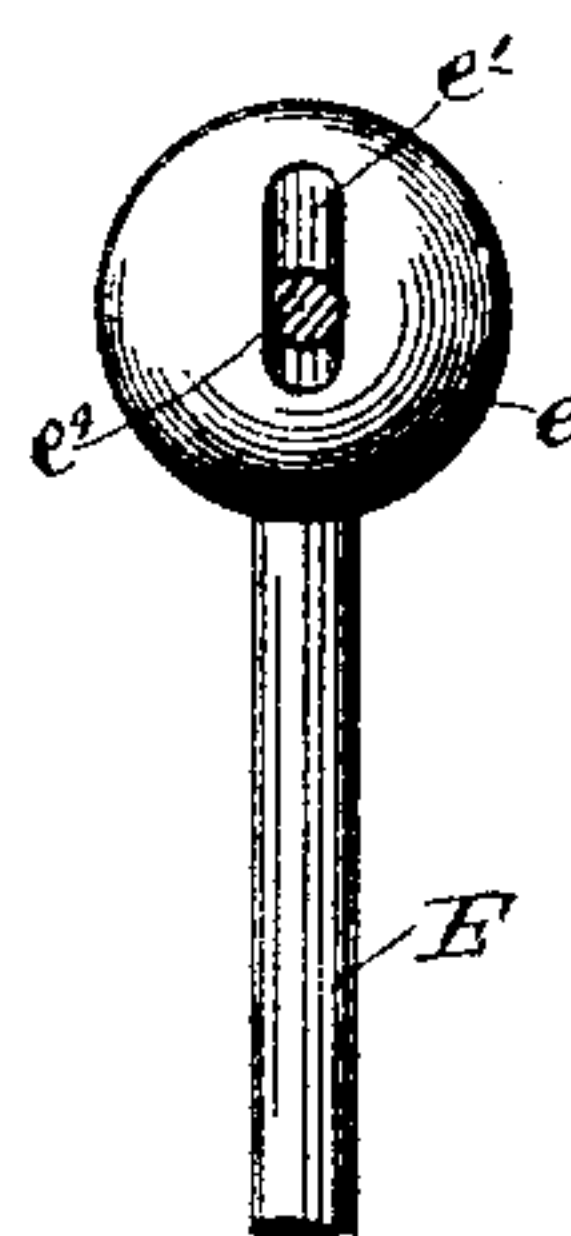


Fig. 10.



Witnesses,
A. H. Opsahl.
Frank L. Merchant,

Inventor.
George H. Coffin
By his Attorney.
Jas. F. Williamson

UNITED STATES PATENT OFFICE.

GEORGE H. COFFIN, OF MINNEAPOLIS, MINNESOTA.

UMBRELLA ATTACHMENT FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 497,068, dated May 9, 1893.

Application filed October 20, 1892. Serial No. 449,431. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. COFFIN, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Umbrella Attachments for Cycles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to umbrella attachments for bicycles, and has for its object to provide an improved support for the umbrella, when spread, and an independent holder or carrier for the umbrella, when closed and out of use.

The invention consists of certain novel features and arrangement of the parts, which will be hereinafter fully described and be defined in the claims.

The preferred form of my devices are illustrated in the accompanying drawings, wherein, like letters referring to like parts throughout the several views, Figure 1 is a left side elevation of a bicycle equipped with my attachments, the umbrella being shown in full lines as spread for use, and in dotted lines in some of its adjustments, and also in its position when folded or closed and out of use. Fig. 2 is a transverse vertical section, taken on the line X X of Fig. 1, looking from the rear toward the front, some parts being broken away, with the umbrella shown in full lines, in position on its holder when closed. Fig. 3 is a detail in plan, showing the base clamp for securing the support to the machine frame, and also a portion of the carrier or holder for the umbrella, when closed. Fig. 4 is a detail in right side elevation, showing the base clamp in its position on the handle post sleeve. Figs. 5 and 6 are details in left side elevation and plan respectively, showing the seat or rest for the ferrule end of the umbrella, when closed, and the way in which the same is secured to the coaster. Fig. 7 is a detail in right side elevation, showing the umbrella clamp on the head of the support; and Fig. 8 is a cross section of the same, on the line X' X' of Fig. 7. Fig. 9 is a detail partly in transverse section and partly in rear elevation, showing the construction of the ball and socket

joint, which adjustably secures together the sections of the umbrella support. Figs. 10 and 11 are details, showing respectively the ball and socket members of the joint, shown in Fig. 9, as they appear when separated, and turned with their engaging surfaces toward the observer.

A represents the wheels, and B the frame of an ordinary bicycle. C is the umbrella. D is the base clamp. E E' the upright or ball and socket sections, and F the umbrella clamp, the said parts taken together constituting the support for the umbrella when spread. Of these parts, the base clamp D, is constructed with a removable jaw d , for applying the clamp to the frame, and is secured to the fixed part of the clamp by a nut and bolt d' . The base clamp is also provided with an eye or seat d^2 , and a jam-screw d^3 , for securing the lower member E of the ball and socket sections of the support, with freedom for both a rotary and a vertical adjustment therein. The lower section E, is formed with an offset or crank-like portion E^2 , for supporting the umbrella to one side of the machine frame, and permitting a lateral adjustment of the same, by rotating the section E on the base clamp D. The upper end clamp F is also preferably constructed with a removable jaw-section f , and a clamping bolt and screw f' , and is preferably made subject to a spring f^2 , tending to open the jaws, when the clamping bolt is released. The body of the umbrella clamp F may be rigidly secured to the upper member E' of the ball and socket sections. In virtue of this construction of the clamps, umbrellas having different sized handles or stocks, may be held thereby; thus removing the necessity of a special construction of the umbrella for its application to the cycle use. The lower member E is provided, at its upper end, with the ball member e , of the joint, which is provided with a radial elongated slot e' . The upper section E' terminates at its lower end in a socket member e^2 , provided with an elongated slot e^3 . A clamping bolt e^4 works through the said slots e' and e^3 , and is engaged by a screw-threaded nut e^5 working over a washer e^6 . The slots e' and e^3 in the two members of the ball and socket joint, are arranged to permit the members to work at angles to each other. This peculiar construc-

tion of the ball and socket joint connecting the sections E and E' permits the section E' to be adjusted in any desired angular direction, with respect to the section E, to an extent sufficient to provide for the desired range of angular adjustment on the umbrella.

The adjustments obtainable by the ball and socket joint, together with the adjustments obtainable by rotating the lower section E, or by raising and lowering the same on the base clamp D, renders it possible to give to the umbrella a universal adjustment sufficient to meet all conditions of the required use. The umbrella, when in the position shown in the drawings in full lines in Fig. 1, for example, may be thrown backward or forward, or laterally to either side, with respect to the section E. The support, together with the umbrella may be set at any desired height by adjusting the same on the base clamp D; and the support, together with the umbrella, may be thrown to either side of the frame, or to a position substantially in line therewith, by rotating the lower section E on the base clamp D.

G is a loop or eye-like bracket, shown as secured to the base clamp D; and H is a ferrule seat or rest, secured to one of the coasters. These two parts G and H, co-operate to form a carrier or holder for the umbrella, when closed and out of use. The ferrule rest or seat is conveniently applied to one of the ordinary coasters *a*, by removing the ordinary clamping bolt, used to secure the coaster to the fork, and by constructing the ferrule rest with a stud-bolt *h* which may be substituted for the clamping bolt on the coaster, and secured by a nut *h'*, thereby securing both the coaster and the ferrule rest, in their proper respective positions. The loop G is of such a size, and is located at such a distance from the ferrule seat H, that it will engage the closed ribs of the umbrella, when the umbrella is placed in the holder, and hold the same under sufficient tension, to prevent the umbrella from rattling or jumping out of the holder, under the vibrating or jarring action of the machine.

The operation of the umbrella support, for holding the umbrella, when spread, has already been stated. The application of the holder G H, for carrying the umbrella, when closed, is obvious. All that is necessary, is to stick the closed umbrella through the eye or loop G, and project the ferrule end of the umbrella into the rest or seat H. When the umbrella is taken down from the support, for holding the same when spread, the section E may be lowered on the clamp D, and the section E' be turned down into a position out of the way. The support D E E' F may be made comparatively light by using aluminum or hollow brass rods, so as to add but little to the load on the machine. By actual usage, I have demonstrated the practicability of my attachments.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. In a cycle equipped with a support for holding the umbrella, when closed, the combination with the cycle frame carrying the coaster or foot-rests *a*, of the loop-bracket G, fixed with said frame, and the ferrule seat or rest H, having the stud-bolt *h*, provided with a nut *h'*, by means of which stud-bolt and nut, the ferrule seat H is secured to said coaster *a* and the said coaster *a* is in turn clamped to the cycle frame, by one and the same clamping action, substantially as described.

2. An umbrella support for use on cycles or similar machines, constructed in sections connected by ball and socket joints, the two members of which are provided with elongated slots, working at angles to each other, through which works a clamping bolt, for securing the same together with freedom for adjustment, at angles to each other, substantially as described.

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

GEORGE H. COFFIN.

Witnesses:

JAS. F. WILLIAMSON,
EMMA F. ELMORE.