W. H. GASKILL.

FOLDING UMBRELLA AND CANE.

APPLICATION FILED JULY 14, 1908.

905,687. Patented Dec. 1, 1908.

Fig. 1.

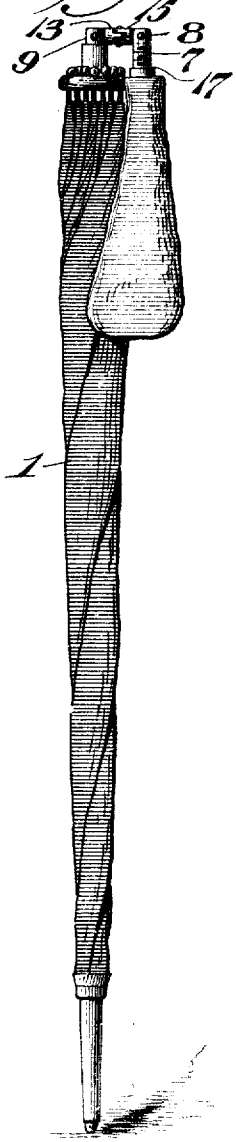


Fig. 3.

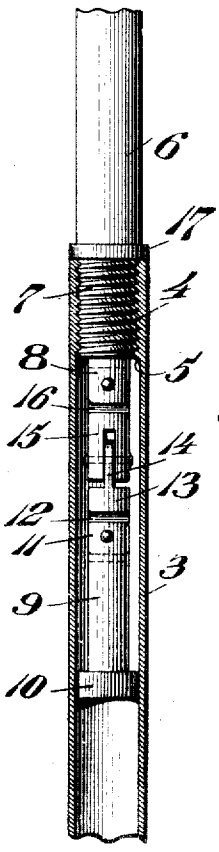


Fig. 2.

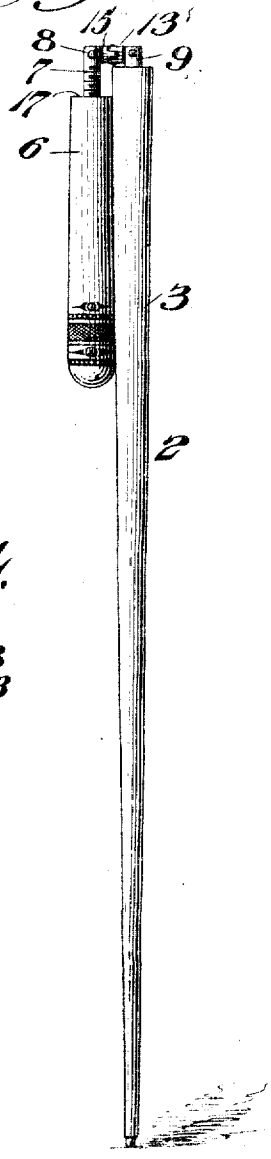
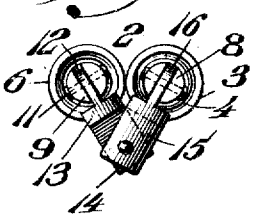


Fig. 4.



Witnesses

H. G. Dieterich

L. K. Wille

Inventor

William H. Gaskill.

By Frederick C. Fairbanks.

Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM H. GASKILL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO SAMUEL W. EVANS, JR., OF PHILADELPHIA, PENNSYLVANIA.

FOLDING UMBRELLA AND CANE.

No. 905,687. Specification of Letters Patent. Patented Dec. 1, 1908

Application filed July 14, 1908. Serial No. 443,412.

To all whom it may concern:

Be it known that I, WILLIAM H. GASKILL, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Folding Umbrella and Cane, of which the following is a specification.

It has heretofore been the practice in constructing knock-down or foldable canes or umbrella sticks, to provide a single link or knuckle which permits one member, as the handle member, to be turned downwardly at a particular angle so that it can lie longitudinally of said cane or umbrella stick, but by reason of this construction, the foldable members are prevented from being assembled closely against each other and there is furthermore, liability in the old construction, to which I have referred, of the link or knuckle being broken or snapped at its joints unless the handle is turned down with great care.

In order to obviate the foregoing disadvantages, I have devised a novel construction of foldable cane or umbrella which can be disconnected and folded downwardly by the operator at any desired angle without damage or liability of breaking any of the links or knuckles employed and I furthermore provide means whereby the members when assembled can lie longitudinally very close to each other, thereby enabling the cane umbrella or parasol to be readily folded and transported under all conditions.

To the above ends my invention consists of a novel construction of a connection between the handle and body of the cane or umbrella stick proper, whereby the handle can be readily turned downwardly at any angle and when turned downwardly, said handle portion can be assembled longitudinally in close juxtaposition to the body of the stick or umbrella.

It further consists of other novel details of construction, all as will be hereinafter fully set forth.

Figure 1 represents an elevation of an umbrella and its stick showing a novel joint or connection embodying my invention applied thereto. Fig. 2 represents an elevation of a cane showing my novel construction or joint or connection applied thereto. Fig. 3 represents a vertical sectional view partly in elevation showing the joint and its adjuncts in the position they normally assume when the case or umbrella is ordinarily in use. Fig. 4 represents a plan view of the joint showing the members or portions of the umbrella stick or cane folded and turned against each other.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings:—In the drawings I have shown a construction which I have found to operate successfully in practice but it will be evident that the arrangement of the parts may be varied and other instrumentalities may be employed which will come within the scope of my invention and I do not therefore desire to be limited in every instance to the exact construction as herein shown and described, but desire to make any changes which may come within the scope or spirit of my invention, which may be necessary.

Inasmuch as I employ substantially the same construction in connection with a cane as an umbrella stick, the same detailed description will be applicable to both.

1 designates an umbrella or umbrella stick and 2, a cane to which my novel construction of joint is applicable and as the construction and arrangement of said joint is the same in each case, I deem it necessary to only describe the same with reference to one of the devices as for example, the cane.

3 designates the body or lower portion of the cane which is formed hollow or provided with a chamber of suitable distance and which is provided with the threaded portion 4 and adjacent to its upper end is located the shoulder 5.

6 designates the upper portion or handle section of the cane which is provided with the threaded end 7 which may be integral or connected with said handle and which has the forked extremity 8.

9 designates a pin slidably and rotatably mounted within the body portion 3 of the cane which is provided with a flange or head 10 adapted to abut against the shoulder 5 so as to prevent longitudinal removal of said pin 9, the latter being provided with a forked head 11. Pivotally connected with the pin 9 and located in the slot of the forked head is the tongue 12 projecting from the body 13 of a link or knuckle which has projecting from

its opposite side, a tongue 14 which is turned or located so as to project at substantially a right angle to the tongue 12, said tongue 14 being pivotally mounted in the fork 15 of the head of the next adjacent link, which is also provided with a tongue 16 which projects at substantially a right angle to the slot of the forked head 15, said tongue 16 being pivoted in the forked head 8 of the projection or extension 7, the latter having the shoulder or its equivalent 17 whereby the proper position of the parts is always assured.

The operation is as follows:—When the umbrella or cane is normally in use, the parts appear substantially as seen in Fig. 3, the pin 9 and the links or knuckles being slid into the body 3 so that the threaded end 7 of the upper portion or handle 6 of the cane or umbrella can be caused to readily engage with the threads 4 on the body portion until the shoulder 17 or its equivalent abuts against the end of the body 3 so that the parts will be properly held or secured in position, the handle 6 having the appearance of being a rigid or integral part of the cane 3. When it is desired to fold the cane or umbrella it can be readily done by unscrewing the threaded member 7 from its engagement with the cane 3, whereupon the links or knuckles and their adjuncts can be withdrawn so that the parts appear as seen in Figs. 1 and 2, the shoulder or flange 10 abutting against the shoulder 5, whereupon the handle 6, the threaded portion 7 and the knuckles or links pivoted thereto can be turned with respect to each other so that the parts appear as seen in Figs. 1 and 2 and by reason of the pivotal connection of the links or knuckles with each other, the two members as the handle 6 and the body 3, can be folded or turned into close longitudinal juxtaposition with each other as will be understood from Figs. 2 and 4 whereby the folded umbrella or cane will occupy a minimum space and there is furthermore, by reason of the manner of constructing and pivoting the links or knuckles so that the same can be turned downwardly in whatever position they may assume no liability of the links or knuckles becoming broken or injured in any way.

I am aware that as heretofore explained it has been the practice to make a knock-down cane or umbrella handle of a single link and I am also aware that it has been proposed in the manufacture of flexible power transmission devices to employ a plurality of links or knuckles connected and inclosed by a sheath but my present invention is to be distinguished from these prior devices since it does not consist in a mere duplication of the links or knuckles but consists of a novel concrete unitary structure wherein the links or knuckles are so assembled and correlated with respect to each other that the turning over of the cane or umbrella handle will in no instance break or damage any of the knuckles or their adjuncts and I furthermore, am enabled by my novel construction to produce a device wherein the folded over members can be brought into closer proximity to each other than heretofore, whereby the device occupies much less space than heretofore.

It will be evident that while I have in the case of the cane shown the handle or upper portion as being equipped with my novel device for enabling the same to be folded downwardly I may locate the joint at about the middle of the cane body and I may transpose or reverse the manner of connecting the parts without departing from the spirit of my invention. That is, I may construct the handle portion to receive the pin 9 and its adjuncts, the operation and function of the device, however, being the same as has already been described with respect to the preferred form shown.

It may be further apparent, that other changes may be made by those skilled in the art which will come within the scope of my invention and I do not, therefore, desire to be limited in every instance to the exact construction I have herein shown and described.

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

1. In a folding cane or umbrella, a plurality of sections, means for enabling said sections to be connected and disconnected from each other, a plurality of links connected to one of said sections, and disconnected from the other section and formed with forks and tongues which are suitably pivoted to each other, said forks and tongues being angularly arranged with respect to each other, and means for preventing said links from being withdrawn from the section in which they are loosely contained.

2. In a folding cane or umbrella stick formed of sections, means for operatively connecting said sections, a forked head on one section, a pin movably mounted in the other section, a shoulder for preventing entire withdrawal of said pin, a link pivotally connected with said pin, a link pivotally connected with said head, and pivotal connections between said links, one of said connections being composed of a body portion having tongues extending at a right angle to each other.

3. A folding cane or umbrella stick, formed of two sections, one section having an internally threaded portion and a shoulder below said threaded portion, the other of said sections having a threaded extremity, terminating in a fork and a shoulder above said

threaded portion, a knuckle consisting of a link having a tongue pivoted in said fork, a fork in said link turned at an angle to said tongue, a second link composed of a body portion having tongues turned at an angle to each other, a pin loose in said internally threaded section and provided with a head or stop thereon, and connections between said pin and links.

WILLIAM H. GASKILL.

Witnessed by:
S. W. FOULKROD,
JERRY MACDONOUGH.