

J. ROSE.
 UMBRELLA RIB.
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1,064,994.

Patented June 17, 1913.

Fig.1.

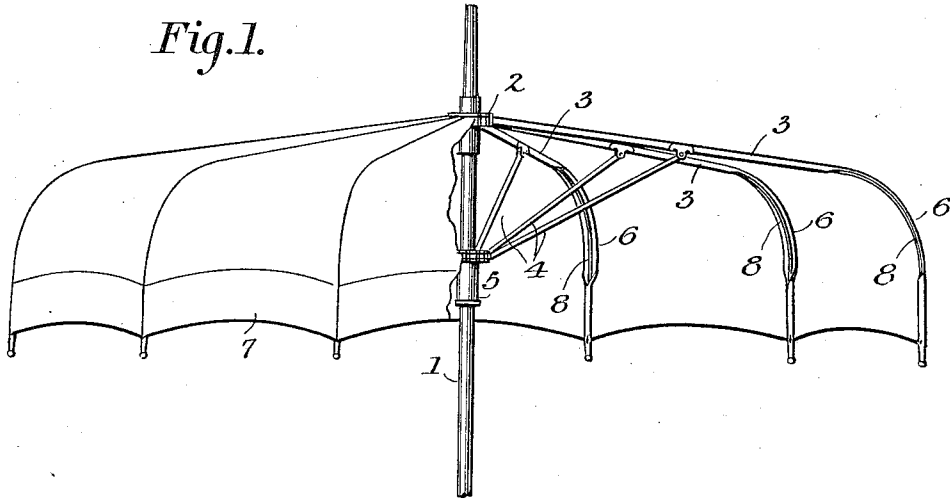


Fig.2.

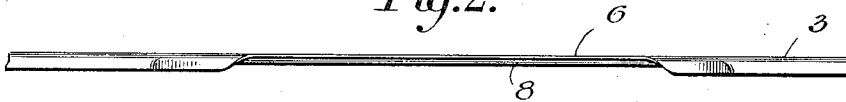


Fig.3.

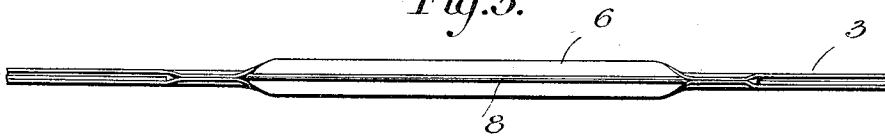
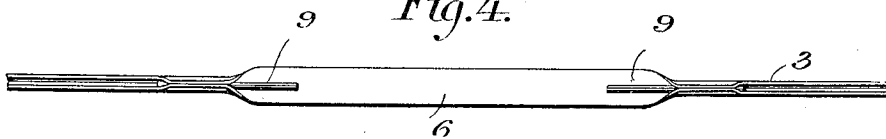


Fig.4.



Witnesses

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UMBRELLA-RIB.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES ROSE, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Umbrella-Ribs, of which the following is a specification.

This invention relates to umbrellas and parasols, and it relates particularly to the construction of the ribs thereof.

The object of the invention is to provide an umbrella or parasol rib so formed, and adapted to be used in connection with a cover of such shape, that when the umbrella is raised a new, advantageous and ornamental shape is given the article.

With this object in view the invention consists of the various novel generic and specific features of construction substantially as hereinafter described and claimed.

The invention is illustrated in the accompanying drawing in which;

Figure 1 is a side view of an umbrella in a raised position with a portion of the cover and ribs removed, and having therein my novel form of rib; Fig. 2 is a side view of a portion of the rib employed; Fig. 3 is a view showing the inner face of a portion of the rib; and, Fig. 4 is a view showing a portion of the inner face of a modified form of rib.

In this drawing 1 represents an umbrella stick to the upper end of which are attached by means of the notch ring 2 the ribs 3, which latter are connected in the usual way by stretchers 4 to a runner 5 movable on the stick. The ribs 3 employed are provided at one or more points in their length with portions 6 which are more yielding or elastic than the remainder of the ribs. The portions 6 may be formed in any suitable way. For instance in a groove or paragon rib the material may be flattened allowing ready bending at the point or points so formed.

The ribs shown in the present embodiment of my invention are provided near their outer ends with flattened portions 6 as shown, and the bending of the ribs is accomplished by means of a cover 7 attached to the ribs in the ordinary way, and provided with a contracted portion which is located adjacent to the flattened portions of the ribs, in order that when the umbrella or parasol is raised abrupt bends are

given all the ribs producing the form shown particularly in Fig. 1 of the drawing. While it is well known that it is common to form umbrella and parasol covers of such shape as to bend the ribs to which they are attached to a certain extent, there is a marked difference between such bending and what is accomplished by my peculiar form of the parts. In the ordinary form the ribs being of uniform strength throughout are only given a gradual bend from end to end and are not bent abruptly at any point.

My form of rib is of particular advantage in umbrellas because of the fact that by its form, ribs of a short length will, when formed and operated according to my invention produce an umbrella which when raised has a greater area of protecting surface than is provided in an umbrella having very much longer ribs formed in the usual way.

The stretchers 4 are preferably of such length and are so arranged that when the umbrella is raised the upper portions of the ribs, above the flattened portions, are moved to a position substantially at right angles to the stick. Being held in this position instead of in the sloping position usually assumed by the ribs, much greater area is covered, and the dip of the umbrella necessary to provide protection to a user is provided by the depressed outer edge of the umbrella.

When the umbrella is raised the desired form is as above described given the ribs by means of the cover having the contracted portion. It is desirable for purpose of close folding when the umbrella is not in use, that the ribs shall under all circumstances assume the usual straight form when the umbrella or parasol is lowered. To insure the return of the ribs to their normal positions when relieved from the tension of the cover I reinforce the flattened portions of the ribs by strips or bars preferably of metal extending wholly or partially across the flattened portions. The reinforcing parts may be of any suitable material or form. One form is shown particularly in Figs. 2 and 3 of the drawing. The form shown in these figures involves the use of a groove or paragon rib which is flattened at one or more points in its length, and the reinforcing piece 8 which may be of spring metal of any desired form in cross section,

and which is secured in place by bending together the walls of the ribs at each side of the flattened portion, securely holding in place the reinforcing pieces the ends of which are introduced between the walls.
5 Any other way of holding the reinforcing piece in position such as soldering, riveting or otherwise connecting it may be employed if desired.

10 Instead of making the reinforcing pieces of a length to extend entirely across the flattened portion, as shown in Figs. 2 and 3 I may if desired employ short pieces 9 as shown in Fig. 4. The short pieces are preferably of spring metal, and are connected to the ribs adjacent to the flattened portion in a manner to extend over part of such flattened portion at one or both ends thereof.

By means of the supplemental strip or
20 bar a cheap construction, involving only the flattening out of a groove or paragon rib to render sections capable of being abruptly bent, is provided, and the instant straightening of a rib when pressure of the cover is removed, is assured.
25

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

1. An umbrella rib having a flattened portion rendering it yielding, and a reinforcing 30 bar or strip attached to the rib and extending along such flattened portion.

2. An umbrella frame comprising ribs each having a flattened portion rendering it yielding, reinforcing bars or strips 35 extending along such flattened portions, and a cover having a contracted portion located adjacent to the yielding parts of the ribs.

3. An umbrella rib of the groove or paragon type having a flattened portion rendering it yielding, and a reinforcing bar or 40 strip confined between the walls of the rib adjacent to the flattened portion and extending along such section.

In testimony whereof I affix my signature 45 in presence of two witnesses.

JAMES ROSE.

Witnesses:

JOHN H. GEISZEL,
ABRAM W. ZUCK.