

(No Model.)

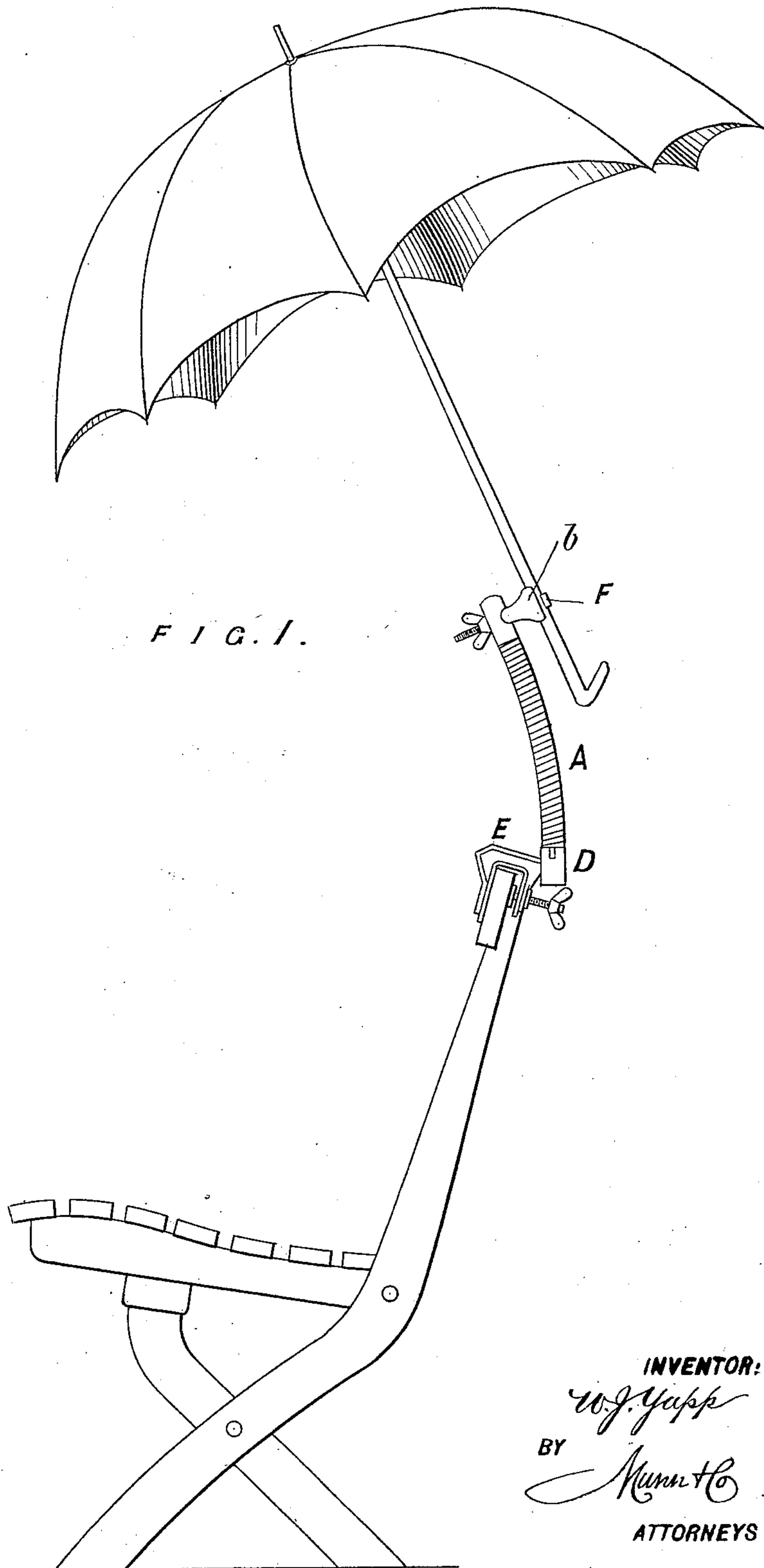
2 Sheets—Sheet 1.

W. J. YAPP.

FLEXIBLE SUPPORT FOR UMBRELLAS, &c.

No. 521,355.

Patented June 12, 1894.



WITNESSES.

C. Sedgwick

Edgar Tate

INVENTOR:

W. J. Yapp

BY

Munn & Co.

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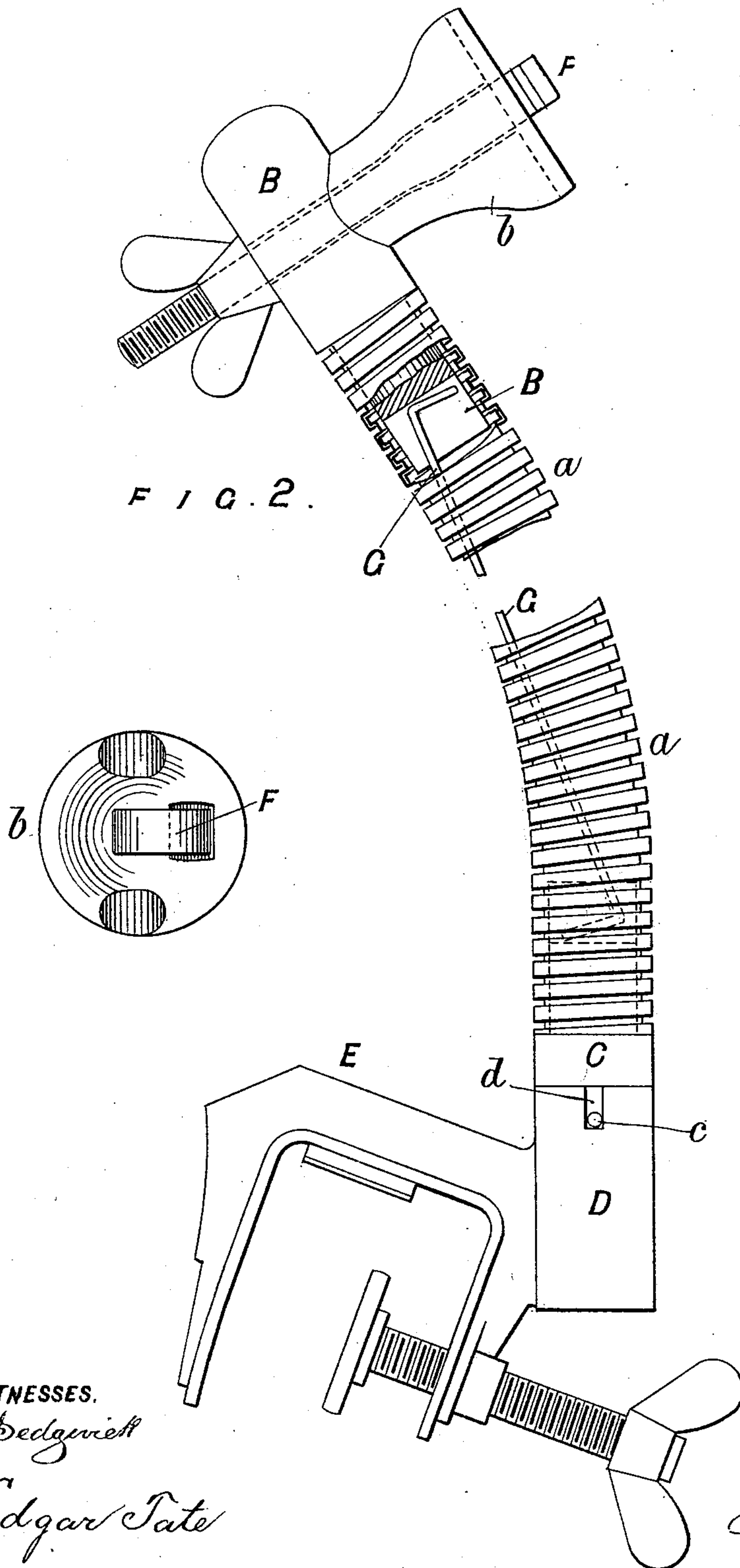
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UNITED STATES PATENT OFFICE.

WILLIAM JOHNSTON YAPP, OF LONDON, ENGLAND.

FLEXIBLE SUPPORT FOR UMBRELLAS, &c.

SPECIFICATION forming part of Letters Patent No. 521,355, dated June 12, 1894.

Application filed September 27, 1893. Serial No. 486,632. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JOHNSTON YAPP, boot manufacturer, of 210 Sloane Street, London, S. W., England, have invented
5 a new and useful Improved Flexible Support for Umbrellas and Sunshades, applicable also as a standard or support for desks and other articles, of which the following is a full, clear, and exact description.

10 My invention relates to a support chiefly designed for holding an umbrella or sunshade in position as an awning above an outdoor seat but applicable as a standard for a book rest, desk, and such like, and the in-
15 vention consists essentially in making the support or standard of flexible metallic tubing constructed of a spirally coiled interlocking strip, the ends of the standard being fitted with plugs provided with clamping de-
20 vices, and a stiffening wire traversing the standard and having its ends held in slots formed in the inner ends of the plugs, the construction being such that while the stand-
25 ard is sufficiently rigid to support the umbrella, book rest, desk, or other article, in any position to which it may be set, its flexibility enables the position of the umbrella, &c., to be readily adjusted by bending the standard in the required direction.

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

Figure 1 illustrates the invention as applied to support an umbrella over a garden
35 seat. Fig. 2 is a part sectional broken view of the standard and its connections separately.

The standard A is a piece of flexible tubing formed of a spirally-coiled steel strip *a* having grooves formed alternately on opposite
40 sides, the coils interlocking as shown and the terminal plugs B C fit in the ends of the tubular flexible standard and are secured by cross-pins or otherwise, the plugs being shouldered
45 so as to abut against the ends of the tube. The plug C is fitted into a socket D and is prevented from turning by the ends of a cross-pin *c* entering notches *d* in the end of the socket. This socket forms part of a screw
50 clamp E adapted to be affixed to the back of

a garden seat, as shown in Fig. 1, or to any other fixed support according to the position or purpose in or for which the standard is to be used. The plug B is provided with an abutment piece *b* grooved to receive the um- 55
brella handle and with a hooked clamp F adapted to be tightened up by a wing nut or other contrivance, so as to firmly grip the um-
brella handle between the hooked end of the clamp and the grooved abutment piece *b*. In 6c
order to give the standard A the necessary stiffness to adapt it to its intended purpose, it is traversed by a steel wire G whose ends are bent at right angles and held in diamet-
65 rical slots in the inner ends of the plugs B C and before cross-pinning or otherwise securing the one plug after securing the other, a certain amount of twist is given to the wire in the direction of coiling the spiral strip *a*
70 forming the tube which puts the tube under an initial strain preventing the coils from unwinding and tending to draw them closer together so as to make them work stiffly on one
another in order to give the tube the necessary rigidity to enable it to support the um- 75
brella in whatever position it may be placed.

Although I have described my invention as an umbrella support I would have it understood that I do not limit myself in this respect, the apparatus minus the clamps be- 8o
ing adapted to form a standard or support for desks and other articles.

I claim—

The combination with the flexible metallic tubular standard, constructed of a spirally 85
coiled interlocking strip, of the plugs fitting the ends of said standard, clamping devices connected with the said plugs, and a stiffening wire traversing the said standard and having its ends held in slots formed in the 9c
inner ends of the said plugs, substantially as shown and described.

WILLIAM JOHNSTON YAPP.

In presence of—

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Lane, London, Patent Agents.