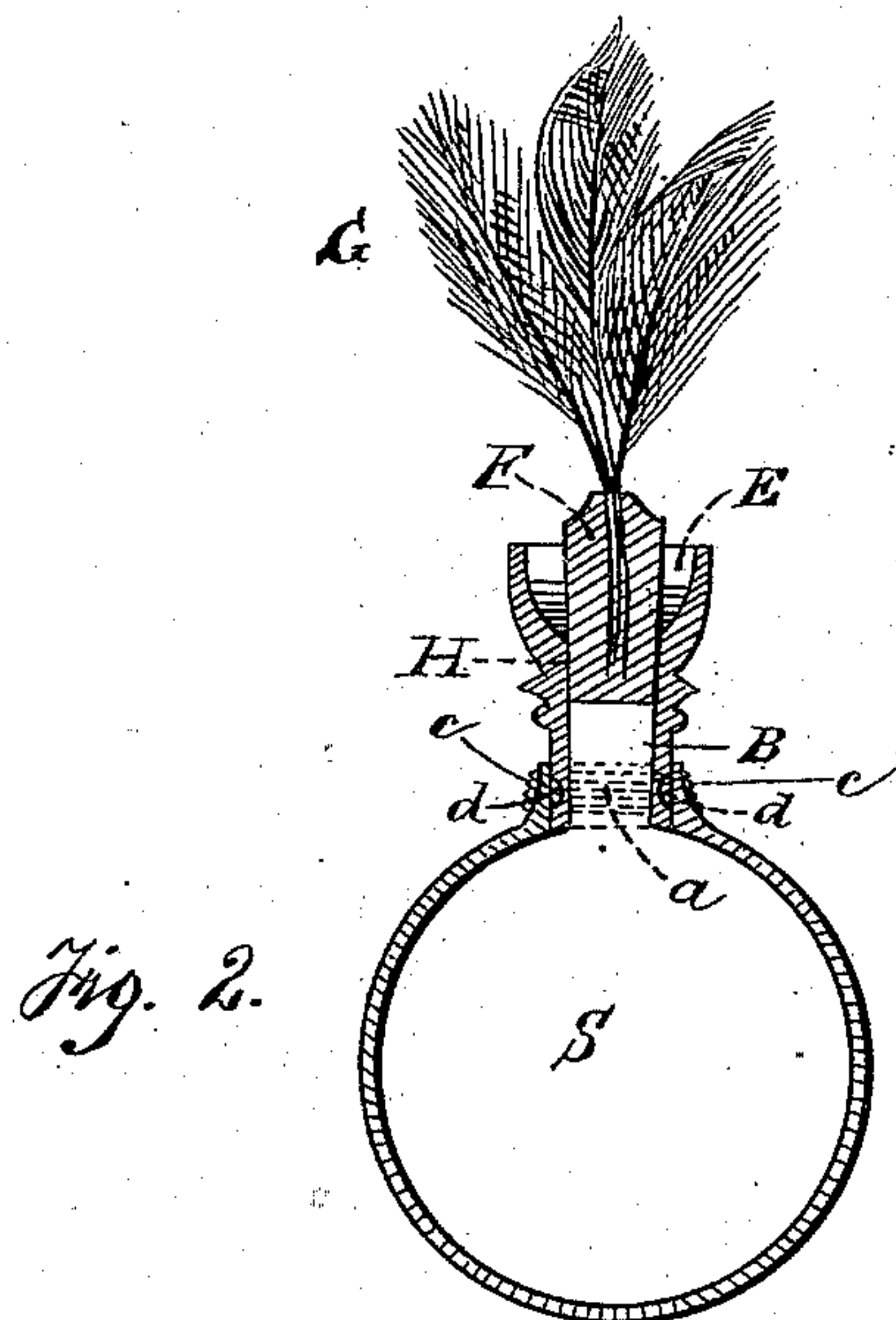
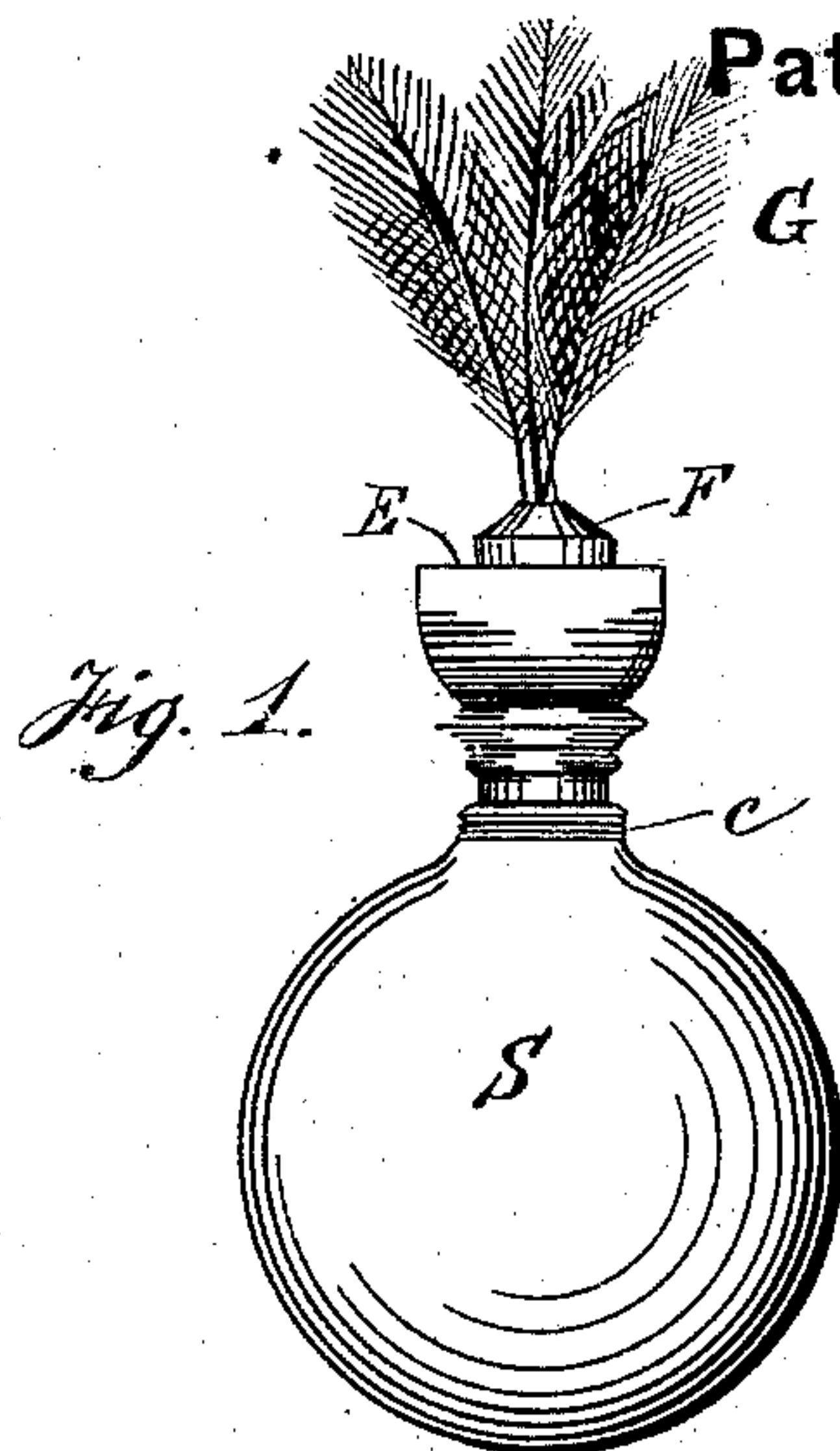


(Model.)

W. DUCHEMIN.  
Toy Shuttlecock.

No. 227,884.

Patented May 25, 1880.



Witnesses:  
H. G. Wadkin.  
C. F. Brown.

Inventor:  
William. Duchemin

# UNITED STATES PATENT OFFICE.

WILLIAM DUCHEMIN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO  
CORNELIUS F. DAVIS, OF SAME PLACE.

## TOY SHUTTLECOCK.

SPECIFICATION forming part of Letters Patent No. 227,884, dated May 25, 1880.

Application filed April 1, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, WILLIAM DUCHEMIN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in a Toy Shuttlecock, of which the following is a specification.

Figure 1 is a perspective view of the toy. Fig. 2 is a central longitudinal section, showing shuttlecock in position.

10 The toy is composed of a hollow elastic ball, S, in which is a circular orifice, *a*, into which is secured the tube B, as shown at *c*. On the peripheral surface of tube B, at its lower end, is a small groove, (shown at *d*,) placed there  
15 for the double purpose of keeping the tube B in position and making an air-tight joint. Its upper end terminates in the form of a cup, as shown at E.

20 The shuttlecock F is made in the usual manner, except that the lower end terminates in the form of a stopper, its diameter being such that it will fit tightly in the central longitudinal orifice of the tube B, as shown at H.

25 Feathers G, or any other balancing medium, are inserted in the upper end of the shuttlecock F, for the purpose of keeping it in a perpendicular position when it is forced from the elastic ball S into the air, so that on its return the lower portion of the stopper will be downward, so as to be caught in the cup E and  
30 tube B.

In practice the shuttlecock F is pressed in the orifice *a* tight enough to make an air-tight joint. The elastic ball S is then quickly compressed by closing the hand, and the shuttlecock forced out and upward into the air by the action of the compressed air, and on its return is caught in the cup E.

Care must be taken not to press the shuttlecock too tightly in the air-orifice *a*, as the friction would then be more powerful than the force of the compressed air, and the shuttlecock would remain in its place.

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

A toy consisting of the combination, with a shuttlecock, F, of a hollow elastic ball, S, provided with tube B, having cup E, the shuttlecock being adapted to be forced out of the tube by the air from the ball when compressed, and to be caught in the cup, substantially as described, and for the purpose set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 27th day of March, A. D. 1880.

WILLIAM DUCHEMIN.

Witnesses:

H. G. WADLIN,  
C. F. BROWN.