

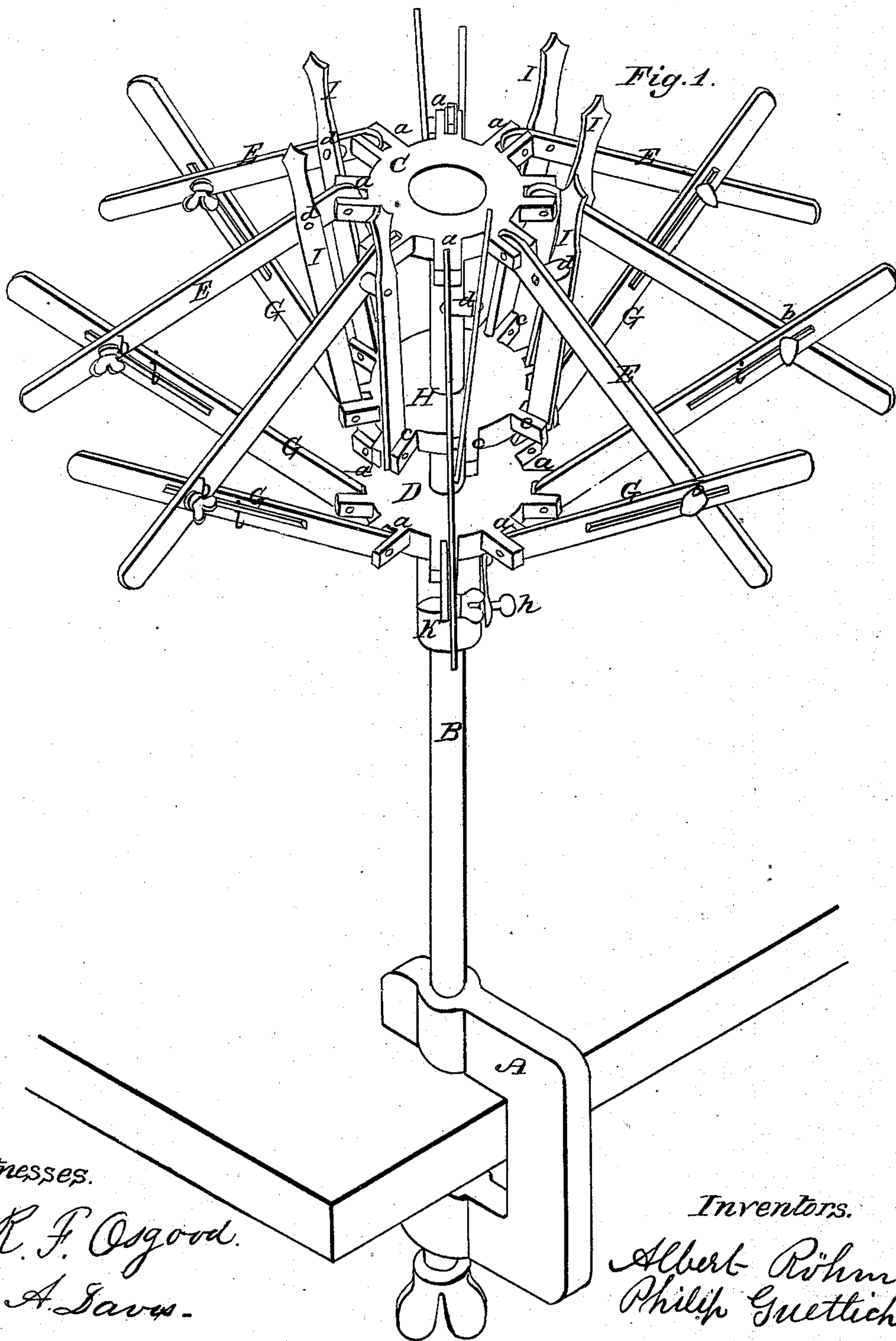
Sheet 1 - 2 Sheets.

Röhm & Guetlich.

Reel.

N^o 60,061.

Patented Nov. 27, 1866.



Witnesses.

R. F. Osgood.
J. A. Davis.

Inventors.

Albert Röhm
Philip Guetlich.

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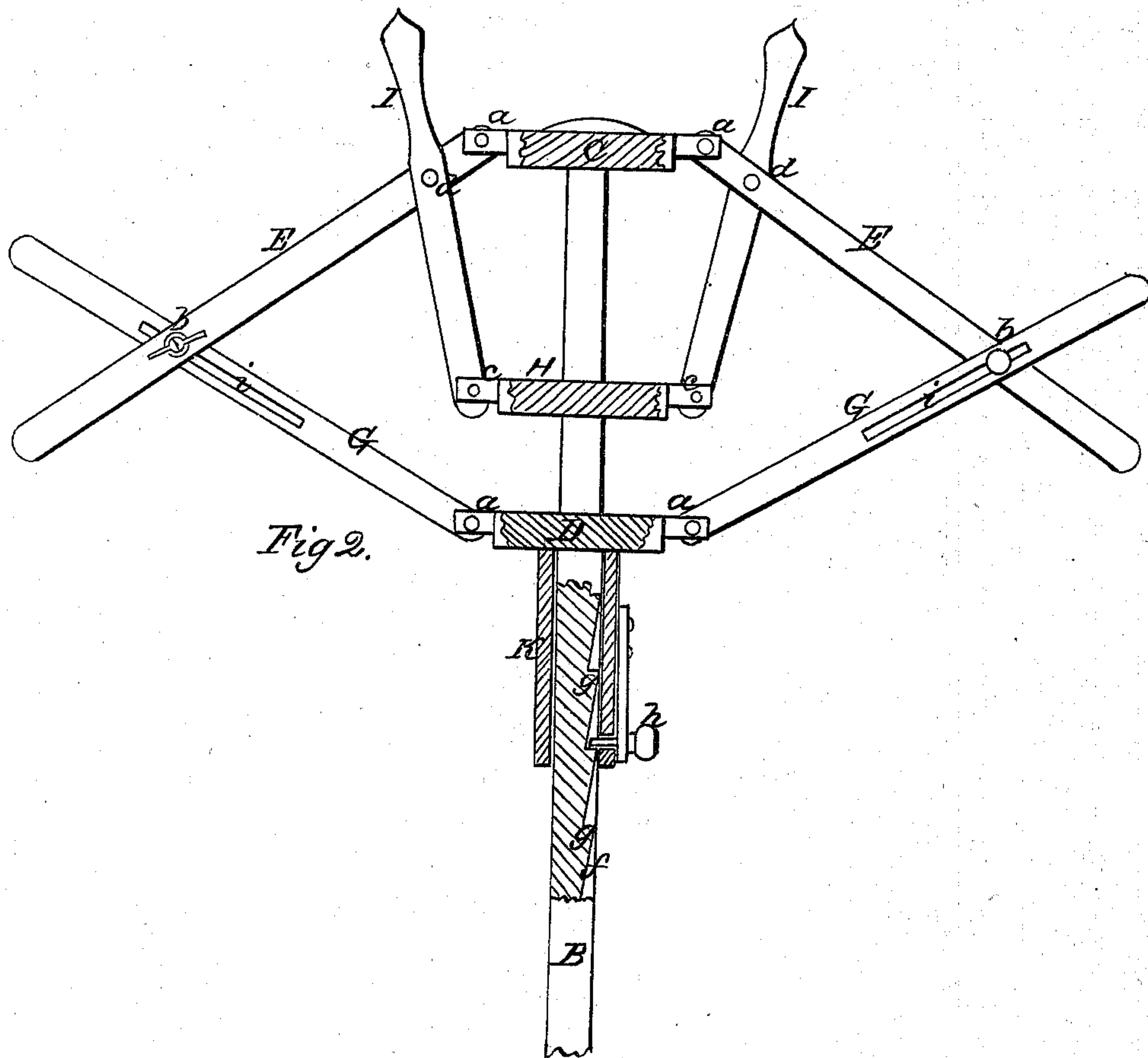


Fig 2.

Witnesses.

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United States Patent Office.

IMPROVEMENT IN REELS OR SWIFTS.

A. ROHM AND P. GUETLICH, OF LANCASTER, NEW YORK.

Letters Patent No. 60,061, dated November 27, 1866.

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ALBERT ROHM and PHILIP GUETLICH, of Lancaster, in the county of Erie, and State of New York, have invented a new and useful Improvement in Reels or Swifts for winding or unwinding yarn, thread, &c.; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a perspective view of our improved reel or swift attached to the top of a table.

Figure 2, a diagram showing an elevation of the upper portion of the same.

Like letters of reference indicate corresponding parts in both figures.

Our invention consists in the combination, with the usual expanding arms, of an auxiliary set of arms, bracing the primary ones, and forming an extra reel or swift of smaller size, as well as ball-holder; also in an improved adjustment of the lower arms, and a sliding catch for holding the arms expanded at any position, the whole operating substantially as hereinafter set forth.

As represented in the drawings, A is a clamp screwing fast to a table leaf, and B is the round standard of the reel or swift rising from it. To the top of the standard is secured a turning disk or head, C, and at a suitable distance below a similar turning and sliding disk, D. To bearings, *a a*, of these disks, are secured, respectively, arms E and G, crossing each other and jointed at *b*, thus forming at the outer forks the ordinary skein-holder. These arms are expanded and connected by simply sliding the disk D, up or down, as in an umbrella. Thus far the construction is the same in substance as in devices now in common use. Between the disks, C D, is another, H, also turning and sliding freely on the standard. To this are jointed, at *c c*, a set of auxiliary arms, I, extending upward beyond the arms, E, and jointed to the latter at *d*. The employment of the auxiliary arms, I, insures several important advantages: First, they form braces to the arms E, and hold them against lateral strain. It is frequently the case that the swift runs very rapidly, and the resistance of the air and the drawing action of the yarn have a tendency to strain and bend them sidewise. The braces thus formed always hold the primary arms in place against such action, and also serve to prevent breakage from sudden stoppage or from blows. Second, the projection of the auxiliary arms above the primary ones, forms a secondary reel or swift of small size, which is very convenient for winding silk and other small skeins which cannot be conveniently wound on the large one; and it will be noticed that this small reel or swift is also capable of expansion and contraction, like the others. Third, the projection of the auxiliary arms above the arms E, also forms a very convenient ball-holder. A groove, *f*, is made vertically in the standard, having ratchet teeth, *g*. Over the standard slides a collar, K, with a spring projection, *h*, striking into the slot, and engaging with the ratchet teeth. By this means it will be perceived that the arms can be held in any position by simply sliding the collar up or down. Instead of pivoting the primary arms at *b*, in a fixed position, we make this joint adjustable by providing the arms G with longitudinal slots, *i*, which slide up and down over the joint when the latter is released.

The joint is composed simply of a set-screw on one side, that passes through both arms and strikes into a nut or bearing on the opposite side. This enables the joint to be tightened or loosened at any time at pleasure.

By the arrangement above described, we can raise or lower the sliding disk D, and its arms G, to a higher or lower position upon the standard, independently of its ordinary expanding or contracting action upon the other arms. This may often be necessary to adapt it properly to the action of the holding collar K, which slides up under it. It will also be observed that this adjustment will increase or decrease the expanding capacity of the reel or swifts, aside from its ordinary expansion, since, when the disk D is lowered on the standard, it has a greater length of stroke upward than usual.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination of the auxiliary arms I, and disk H, with the primary arms E G, and disks C D, operating substantially as and for the purpose herein set forth.

We also claim, in combination with the above, the slots *i*, and joints *b*, for the purpose of producing an independent adjustment of the lower arms, as set forth.

We also claim, in combination with the above, the ratchet teeth *g*, and collar K, with spring projection *h*, operating in the manner and for the purpose specified.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

ALBERT ROHM,
PHILIP GUETLICH.

Witnesses:

J. FRASER,
JAMES C. BROWN.