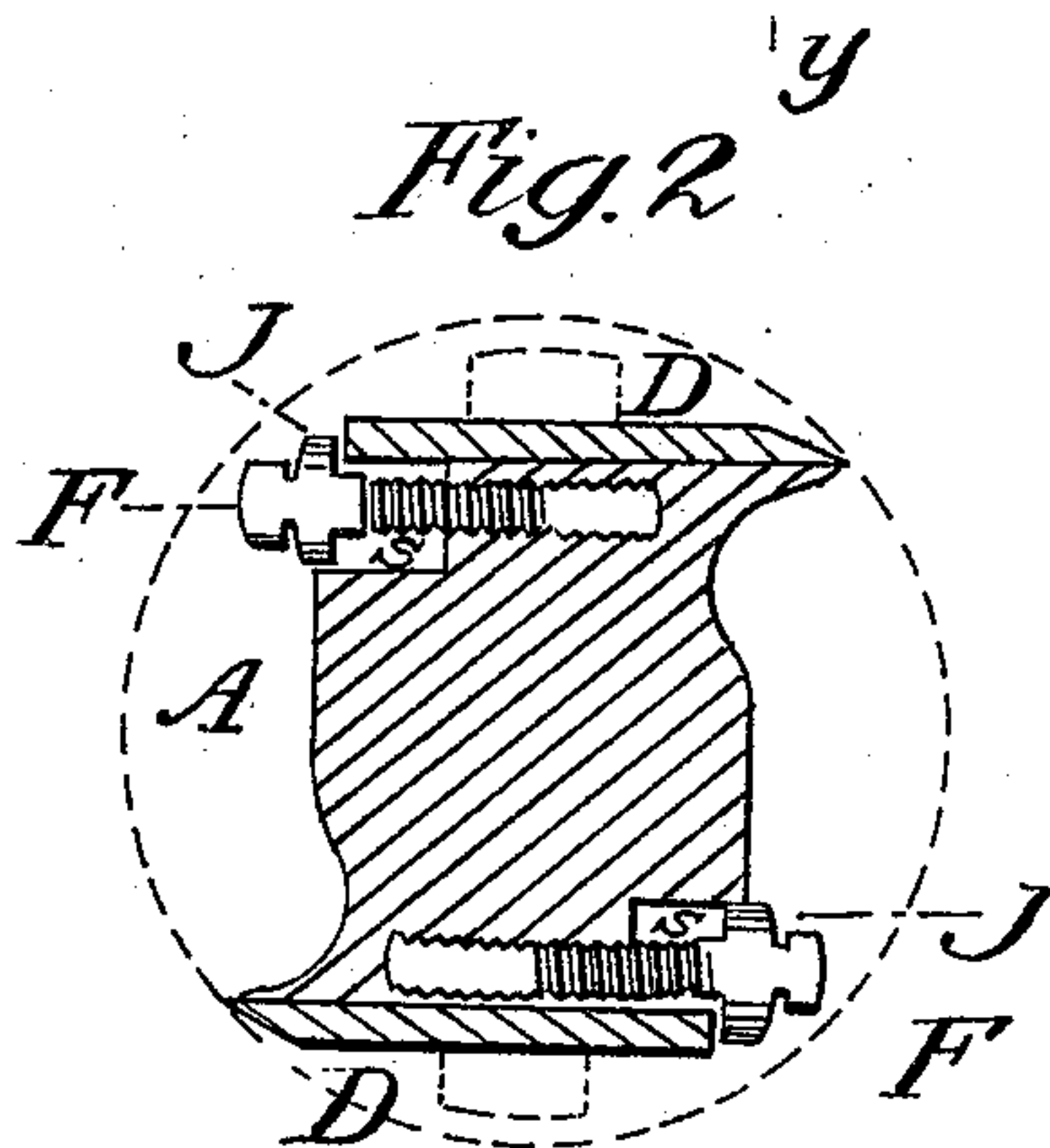
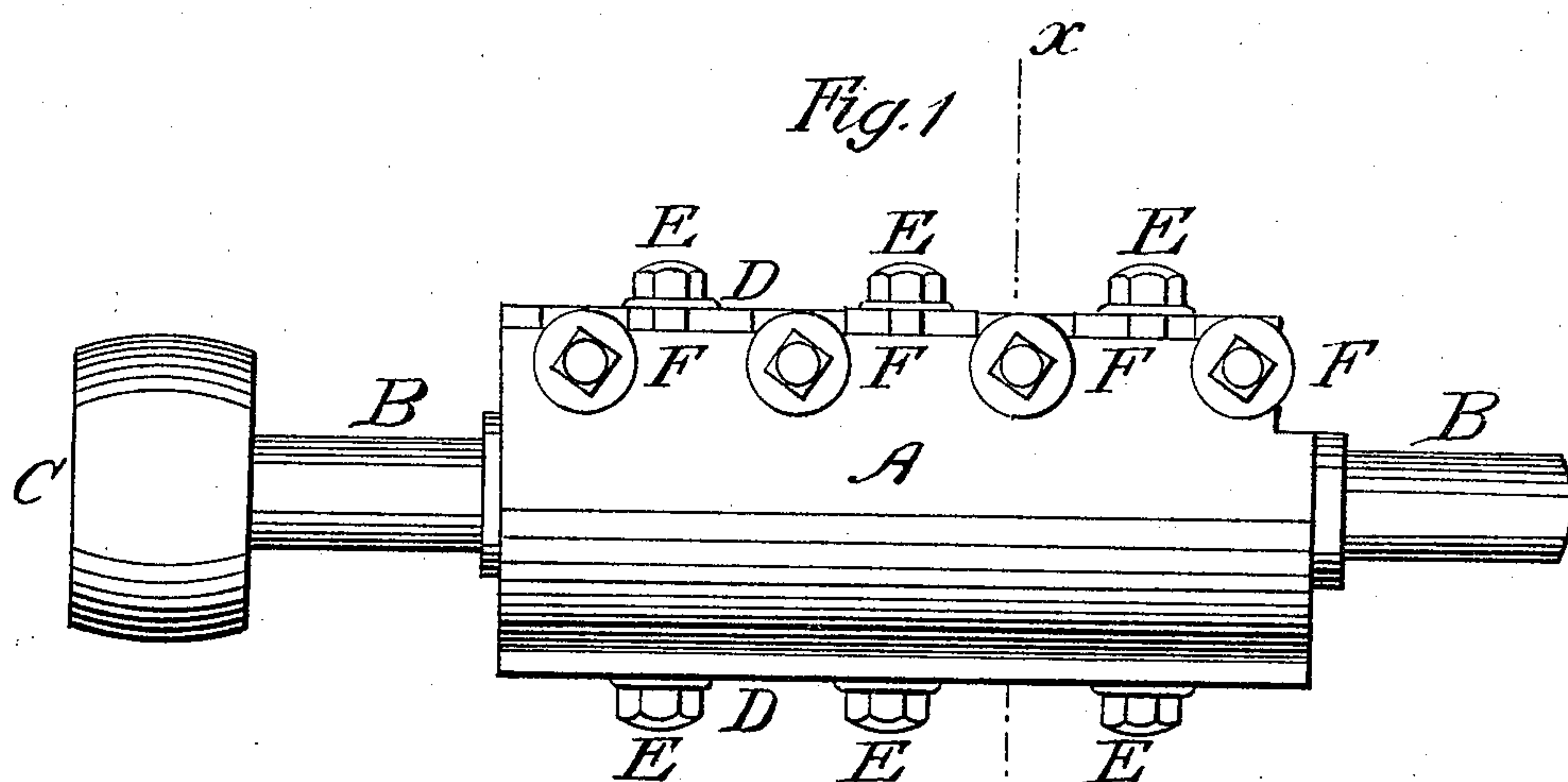


B. Fitts,
Cutter Head,
No 23,763, Patented Apr. 26, 1859.



Witnesses
H. A. Richardson
Edwin A. Moody

Inventor
Bernard Fitts

UNITED STATES PATENT OFFICE.

B. FITTS, OF WORCESTER, MASSACHUSETTS.

METHOD OF ADJUSTING THE KNIVES OF ROTARY CUTTER-HEADS FOR PLANING WOOD.

Specification of Letters Patent No. 23,763, dated April 26, 1859.

To all whom it may concern:

Be it known that I, BENAIHA FITTS, of the city and county of Worcester and State of Massachusetts, have invented a new and
5 useful Improvement in Cutting Cylinders for Wood-Planing Machines; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being
10 had to the accompanying drawings, which composes a part of this specification, and in which—

Figure 1 is a side view with a part of the cylinder cut away to show the bolt. Fig. 2
15 is a section through H, G, to show the bolts F, F, the same letters referring to the same parts in both.

A is the cylinder which consists of a bar of iron or other material, being similar in
20 form to those in common use with a lip or double iron for breaking the chip if desired.

B, B, are bearings for the cylinder to turn on.

C, is a pulley to drive the cylinder.

25 D, D, are the knives or cutters.

E, E, E, E, E, E are bolts to fasten on the cutters D, D.

F, F, F, F, are adjusting set bolts screwed into the cylinder directly under the knives
30 for the purpose of setting or adjusting the knives, having collars or heads I which bear against the back of the knives as shown in Fig. 2, a hole being drilled into the cylinder and a thread cut to correspond to the
35 bolt and counterbored or drilled as shown at S, S, to allow of the knife being drawn down to any desired depth as it wears up.

It is usually found advantageous in using

rotary planer cylinders that they be as small as possible and give some to properly se- 40
cure and adjust the knife. It is necessary also that the back of the knife should be kept out as near the circle marked K, in Fig. 2 as possible so that it will cut free
45 and not scrape.

What constitutes the characteristic features of my invention is placing the bolts F, under the knife with the collar or head as set forth thus allowing the knife to be placed in the most favorable position for cutting, 50
at the same time keeping the bolts within the circle K.

The operation is simple—when a knife is to be put in, let the bolts be loosened back, put on the knife, screw up the bolts E, then 55
turn up the bolts F, so as to bring the knives to any desired position. If one knife have a rough edge so as to leave a smooth surface, by starting the opposite set bolt the other knife may be brought forward enough 60
to prevent it, and in a moment's time without loosening a bolt.

What I claim as new and desire to secure by Letters Patent is—

Placing the bolt F, F, Fig. 2 or its equivalent under the knife, to operate or adjust the knives as set forth and described. 65

In witness whereof I have hereunto set my hand and seal this fifteenth day of December in the year of our Lord one thousand 70
eight hundred and fifty-eight.

BENAIHA FITTS. [L. S.]

In presence of—

H. A. RICHARDSON,
EDWIN A. WOOD.