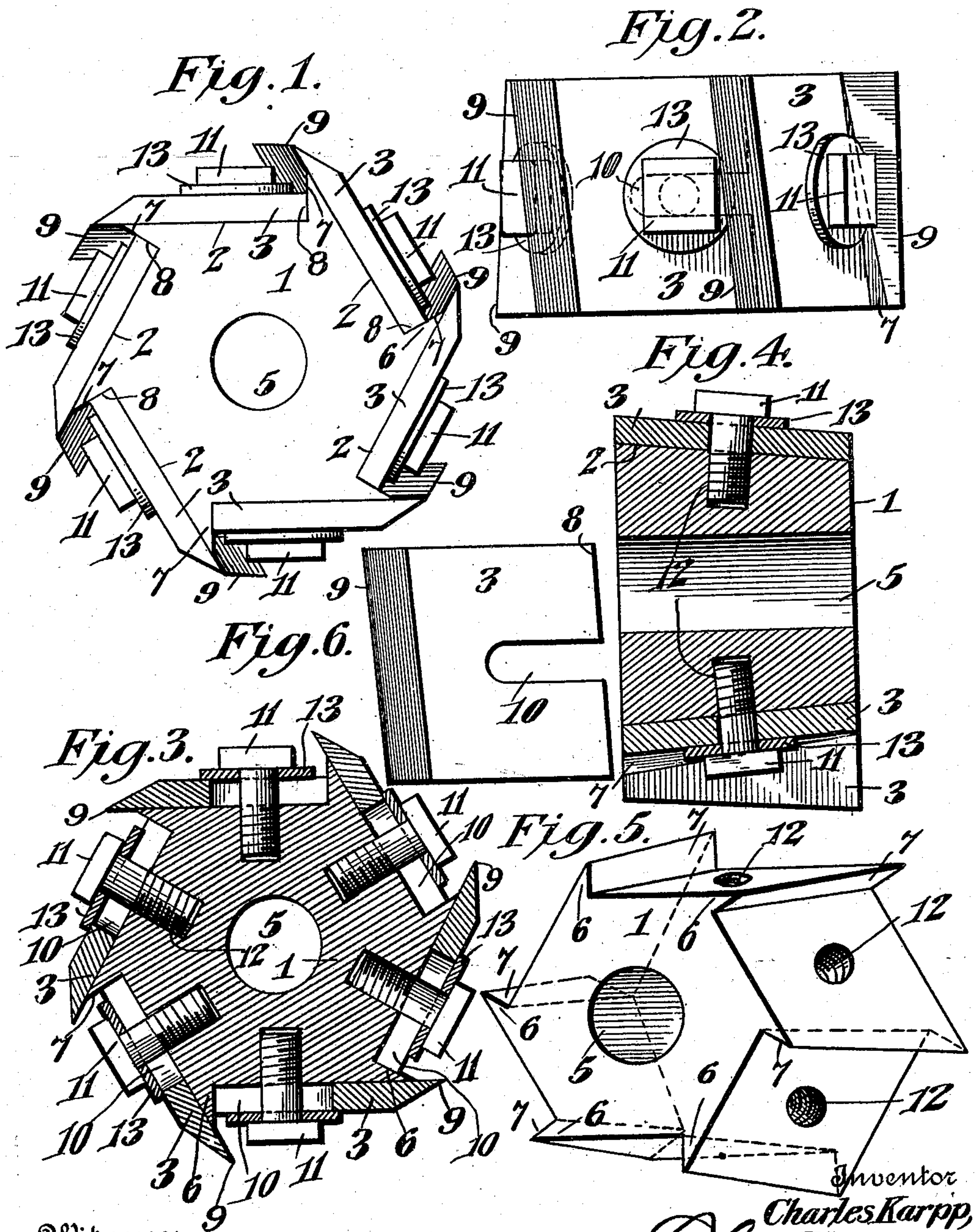


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 ROTARY CUTTER FOR WOODWORKING MACHINES.  
 APPLICATION FILED MAY 25, 1908.

924,240.

Patented June 8, 1909.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## ROTARY CUTTER FOR WOODWORKING-MACHINES.

No. 924,240.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed May 25, 1908. Serial No. 434,830.

*To all whom it may concern:*

Be it known that I, CHARLES KARPP, a citizen of the United States, residing at Flushing, in the county of Queens and State of New York, have invented a new and useful Rotary Cutter for Woodworking-Machines, of which the following is a specification.

The invention relates to improvements in rotary cutters for wood working tools.

The object of the present invention is to improve the construction of rotary cutters for wood working machines, and to provide a simple and comparatively inexpensive and noiseless cutter, designed for plain work, molding, joints, etc., and adapted to afford a smooth, clean shear-like cut.

A further object of the invention is to provide a rotary cutter of this character, which will require but little pressure to be exerted in forcing the wood through the machine, and adapted to operate effectively on short pieces.

Another object of the invention is to enable the knives or cutters of the rotary cutter to be filed sharp on the cutter head the same as an ordinary planing knife without removing the cutters or blades from the cutter head.

With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a side elevation of a rotary cutter, constructed in accordance with this invention. Fig. 2 is a plan view of the same. Fig. 3 is a longitudinal sectional view of the rotary cutter. Fig. 4 is a transverse sectional view of the same. Fig. 5 is a detail perspective view of the cutter head or stock. Fig. 6 is a detail view of one of the knives or cutters.

Like numerals of reference designate corresponding parts in all the figures of the drawing.

1 designates an approximately hexagonal cutter head or stock tapered transversely, as clearly shown in Fig. 4 of the drawing, and

provided with six cutter or knife-receiving 55  
faces 2, forming a continuous series and  
disposed at an angle of one hundred and  
twenty degrees to each other for causing  
the projecting cutting portions of the knives  
or cutters 3 to be arranged at an angle of 60  
sixty degrees to each other. The cutter  
head, which has a central opening 5, is pro-  
vided at its angles with projecting transverse  
flanges 6, located at the periphery of the cut- 65  
ter head and tapered both transversely and  
longitudinally and supporting the projecting  
portions of the cutters or knives. The pe-  
ripheral transverse flanges are provided with  
inner faces 7, arranged perpendicular to the  
adjacent cutter or knife-receiving faces 2 and 70  
adapted to form shoulders or abutments for  
the rear ends 8 of the knives or cutters 3 to  
prevent the same from shifting backward, as  
clearly illustrated in Figs. 1 and 3 of the  
drawing. The knives or cutters are trans- 75  
versely inclined owing to the taper of the  
cutter head, and their projecting portions  
are beveled to form cutting edges 9, which  
are arranged at an angle to the direction of  
movement of the knives or cutters so as to 80  
enable the same to have a shear-like cut.  
The knives or cutters taper reversely with  
relation to the taper of the flanges 6. The  
chip or shaving cut by a knife starts from the  
blade at the small end of the transverse 85  
flange 6, which gradually increases in width  
to the other side of the cutter head, where  
the chip or shaving is discharged and where  
the flange is the widest, so as to afford in-  
creased support for the blade or cutter and to 90  
prevent the chips or shavings from backing  
up under the cutter or blade and lifting the  
same. This transverse inclination of the  
knives or cutters and the angular disposition  
of the cutting edges thereof together with the 95  
large number of knives or cutters enable the  
rotary cutter to operate noiselessly and to  
make a clean, smooth shear-like cut. This  
construction also enables the cutter head to  
operate effectively on short lengths, say six 100  
or seven inch pieces, without danger to the  
operator. The knives or cutters, which are  
adjustable, are provided with longitudinal  
slots 10, extending forwardly from the inner  
or rear ends 8 and terminating at or near the 105  
centers of the knives or cutters and receiving  
clamping screws 11. The clamping screws  
11 engage threaded sockets 12 of the cutter



head, and washers 13 are preferably interposed between the heads of the screws and the outer faces of the knives or cutters.

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

1. A rotary cutter including a polygonal-shaped cutter head tapered transversely and having a continuous series of inclined peripheral supporting faces and provided at its angles with projecting transverse flanges having a longitudinal taper, and transversely inclined knives or cutters secured to the peripheral supporting faces and tapered reversely with relation to the taper of the flanges to form angularly disposed cutting edges.

2. A rotary cutter including a polygonal-shaped cutter head tapered transversely and presenting a continuous series of inclined pe-

ripheral supporting faces, and provided at its angles with projecting transversely disposed flanges tapered both longitudinally and transversely and forming shoulders at the rear ends of the peripheral faces and providing supporting edges located at the front of the supporting faces and forming continuations thereof, and blades secured to the peripheral supporting faces of the rotary cutter and inclined transversely and tapered reversely with relation to the taper of the flanges to form angularly disposed cutting edges arranged to make a shear-like cut.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES KARPP.

Witnesses:

OTTO GREENBERGER,  
B. B. ZIPPERT.