

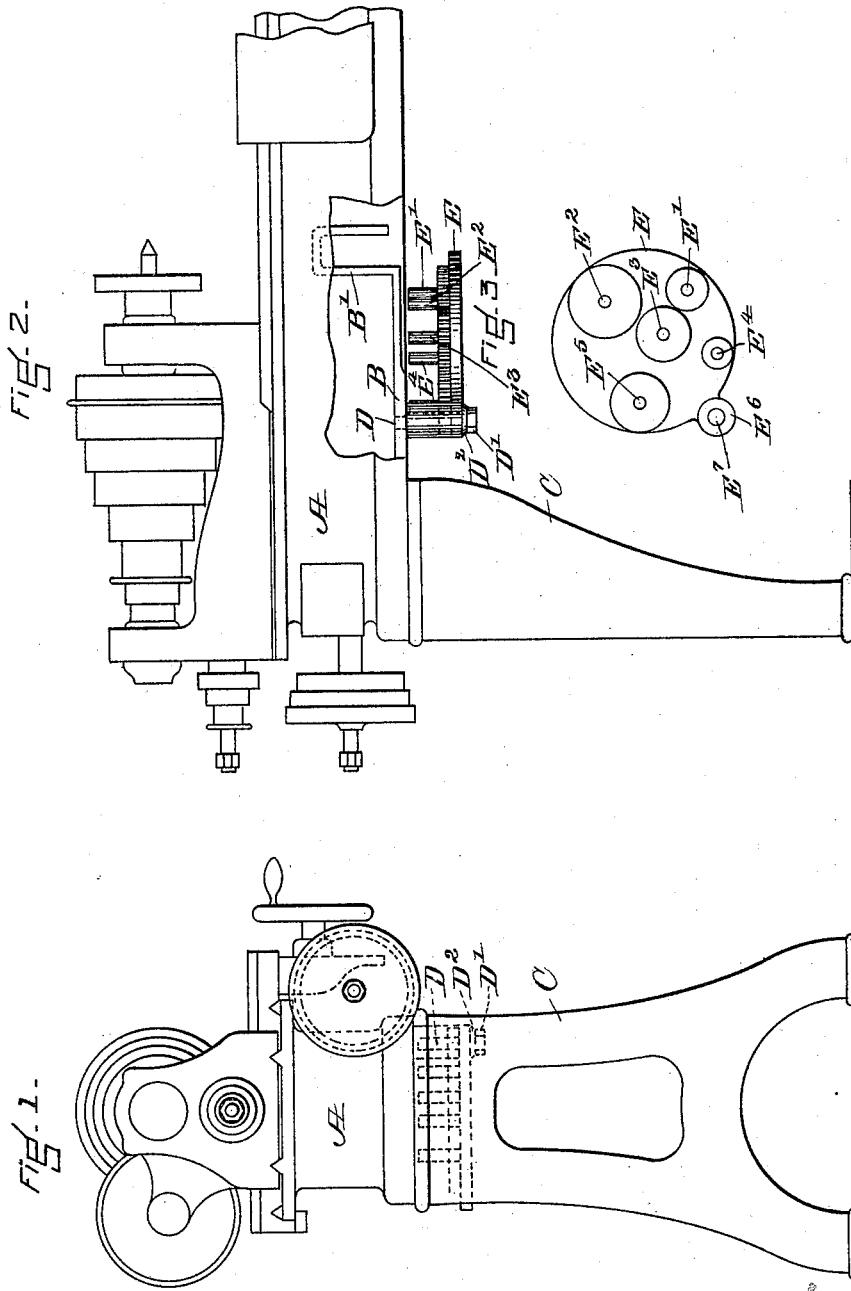
No. 635,013.

Patented Oct. 17, 1899.

J. FLATHER.  
SWINGING SHELF FOR GEARS.

(Application filed Nov. 7, 1898.)

(No Model.)



WITNESSES.

A. D. Grover.  
Fred E. Dorr.

INVENTOR-  
Joseph Flather  
By Richard P. Elliott  
his Attorney-

# UNITED STATES PATENT OFFICE.

JOSEPH FLATHER, OF NASHUA, NEW HAMPSHIRE, ASSIGNOR OF ONE-HALF  
TO FLATHER & CO., OF SAME PLACE.

## SWINGING SHELF FOR GEARS.

SPECIFICATION forming part of Letters Patent No. 635,013, dated October 17, 1899.

Application filed November 7, 1898. Serial No. 695,711. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH FLATHER, a citizen of the United States, residing at Nashua, county of Hillsborough, and State of New Hampshire, have invented certain new and useful Improvements in Swinging Shelves for Gears; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to an improvement in a shelf for the feed or change gears of a lathe, and has for its objects to provide a swinging shelf located under the bed of the lathe, having pins on which the gears are strung; also, to locate the gears where they are easy to get at and will be free from dirt and chips.

In the drawings accompanying this specification, Figure 1 represents an end elevation of a lathe with an elevation of the swinging shelf in dotted lines as attached thereto. Fig. 2 is a side elevation of a portion of a lathe-bed with a side elevation of the swinging shelf attached thereto. Fig. 3 is a plan or top view of the swinging shelf detached from the lathe-bed.

Similar letters refer to similar parts throughout the several views.

A represents the bed of a lathe.

B is a shelf or web cast between the lower edges of the bed and extends from the end of the lathe-bed to the cross-piece B' and has for its object to prevent dirt and chips from falling on the change or feed gears.

C is the leg of the lathe.

D is a stud attached to the under front edge of the bed A and is provided with the threaded nut D' and the washer D<sup>2</sup>.

E represents the swinging shelf, which has the boss E<sup>6</sup> extending upward from its upper surface and the hole E<sup>7</sup> to receive the stud D, upon which the shelf E has a free horizontal swinging movement.

The shelf E is provided with the pins E', E<sup>2</sup>, E<sup>3</sup>, E<sup>4</sup>, and E<sup>5</sup>, adapted to receive the change or feed gears by reason of their form and location on the shelf E.

In operation when the shelf is not in use it is swung under the bed of the lathe, as shown by dotted lines in Fig. 1, where it is out of the way of the operator and will not catch the dirt and chips that fall from the lathe when in use. When a gear contained thereon is needed, the shelf is swung forward from under the bed of the lathe and the gear removed or others placed thereon.

Having fully described my invention, what I claim is—

The combination with a lathe-bed having a web cast between the lower edges of the bed under the head-stock, with a shelf provided with an upward-extending boss, a stud fitting in a hole in said boss and attached to the under side of the front edge of the lathe-bed in such manner as to permit the shelf to swing horizontally, and pins secured in the upper side of said shelf and properly located to receive change-gears of different sizes, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 29th day of October, A. D. 1898.

JOSEPH FLATHER.

Witnesses:

IRA F. HARRIS,  
J. B. TILLOTSON.