

No. 636,253.

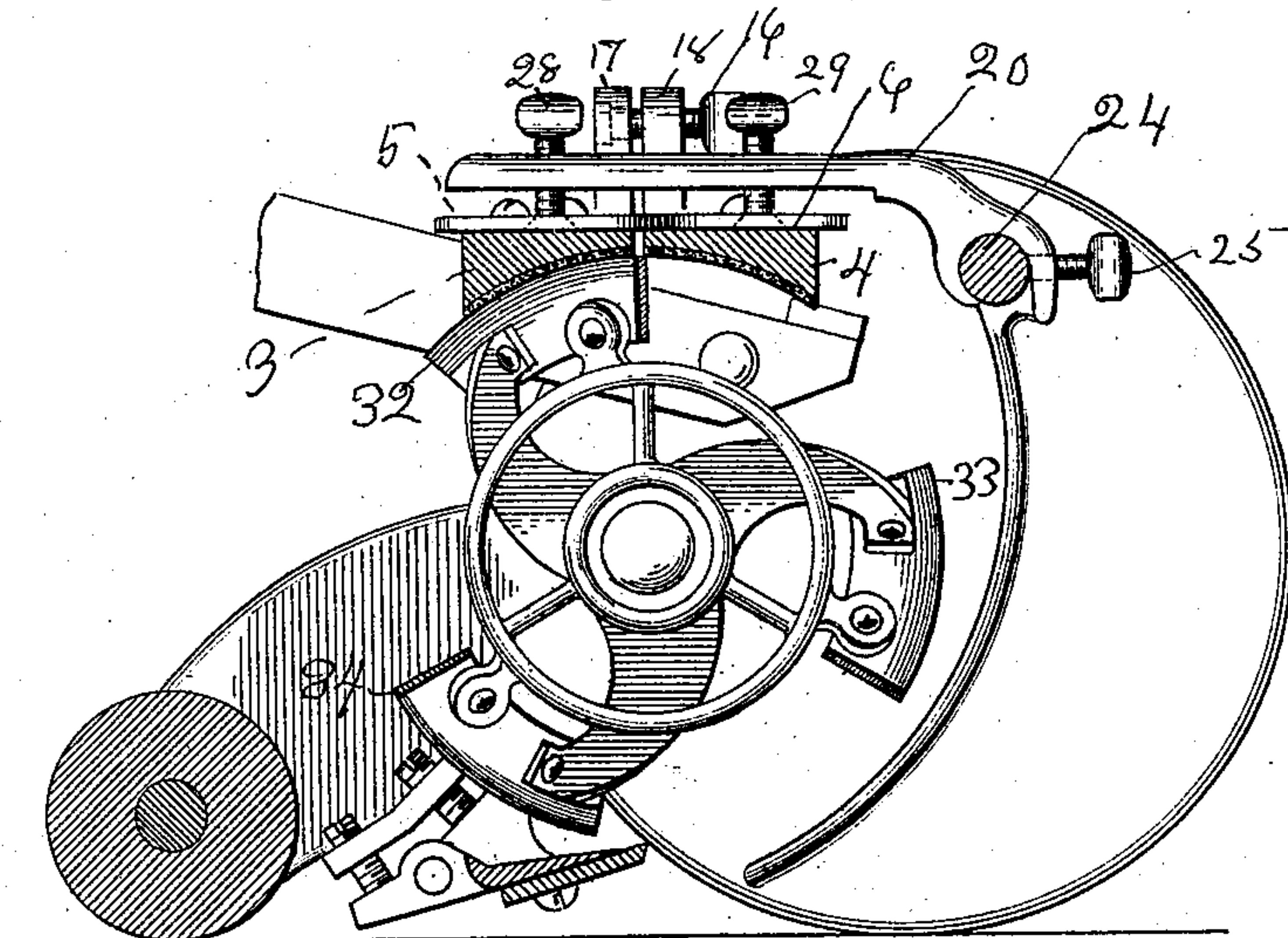
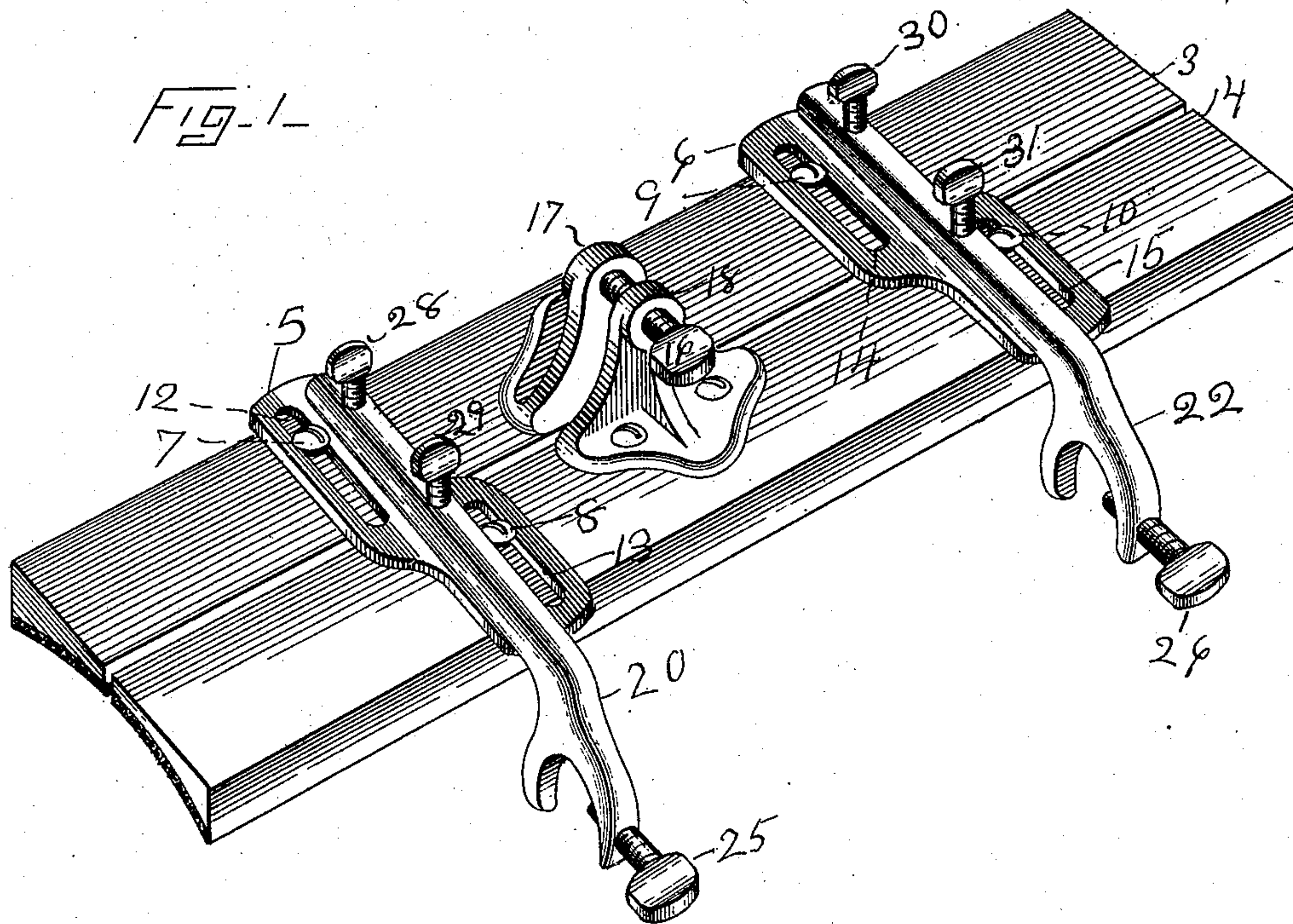
Patented Nov. 7, 1899.

G. B. FRENCH.

MEANS FOR SHARPENING LAWN MOWERS.

(Application filed Oct. 25, 1898.)

(No Model.)



WITNESSES-

A. M. Tuttle
M. M. Tuttle

Fig-2-

INVENTOR-

Gilbert B. French
By C. B. Tuttle

UNITED STATES PATENT OFFICE.

GILBERT B. FRENCH, OF LYNN, MASSACHUSETTS.

MEANS FOR SHARPENING LAWN-MOWERS.

SPECIFICATION forming part of Letters Patent No. 636,253, dated November 7, 1899.

Application filed October 25, 1898. Serial No. 694,523. (No model.)

To all whom it may concern:

Be it known that I, GILBERT B. FRENCH, of the city of Lynn, county of Essex, Commonwealth of Massachusetts, have invented certain Improvements in Means for Sharpening Lawn-Mowers, of which the following, read in connection with the accompanying drawings, is a specification.

In the accompanying drawings, Figure 1 is a perspective view of the device comprising this invention. Fig. 2 is an elevation of a cross-section of an ordinary lawn-mower and this invention applied thereto and shows the invention adjusted for use.

My invention comprises a grinder, shown in the present instance as composed of two parts 3 4, which are disposed side by side and approximately near together. Connected with the parts 3 4 are plates 5 6, the connection being effected by screws 7 8 9 10, which screws, being arranged through elongated openings 12 13 14 15 in the plates, permit of adjustment as required for shifting the position of the parts 3 4 horizontally either in unison or separately, and, further, permits the adjustment desired for shifting the distance of the parts from one another, and to facilitate the making of this latter adjustment with certainty I prefer to employ the screw 16 and the connecting-brackets 17 18, as shown.

For connecting the grinder with the mower I employ the bracket-arms 20 22, which have their rear ends recessed for receiving the connecting-rod 24 of the mower and carry screws 25 26, whereby to be clamped in position on the rod 24, Fig. 2. Said arms are further provided with screws 28 29 30 31, which screws, passing through the arms, are connected by their bottom ends with the plates 5 6, whereby to support the plates, and consequently the grinder, in position horizontally above the mower-knives 32 33 34, and the screws may be turned in the arms 20 22 for shifting the grinder to horizontal planes of different altitudes. The grinder has its under face covered with emery or other suitable grinding material, and preferably said face is concaved, as shown.

In use the grinder is adjusted with its under or grinding face in a horizontal plane for suitably contacting with the mower-knives in order for grinding and sharpening the cutting edges thereof when the same are moved around, as in the general use of the machine, and the described adjustments vertically and horizontally are in part designed for adapting the invention for use in connection with different mowers of varying size and structure.

By the vertical adjustment, for example, the grinder may be fitted to the knives of different radial extension. By the horizontal adjustment it may be set forwardly or backwardly to suit the distance, as required in different machines, from the connecting-rod 24, and this adjustment, further, allows the position of the grinder to be varied, so as to shift the line of wear on the grinding-face, and thus extend the life or use of the same in cases where the curvature of the grinding-face is not identical with the line described by the knives. The adjustment of the parts 3 4 relatively to one another affords the additional means of shifting the curvature of the grinding-face.

I claim—

1. A device for sharpening lawn-mower knives, consisting of bracket-arms, and grinding means curved in the arc of a circle the center of which is the axis of the mower-knives, and means for adjusting the grinding means toward and away from the knives and also means for adjusting the grinding means edgewise relative to the arms, the arms being held stationary.

2. In a device of the character indicated the bracket-arms 20, 22 having provision for engagement with the connecting or frame rod 24 of the mowing-machine, combined with grinder means comprised of the parts 3, 4 and means for shifting the parts in relation one to the other, substantially as described.

GILBERT B. FRENCH.

Witnesses:

C. B. TUTTLE,
A. M. TUTTLE.