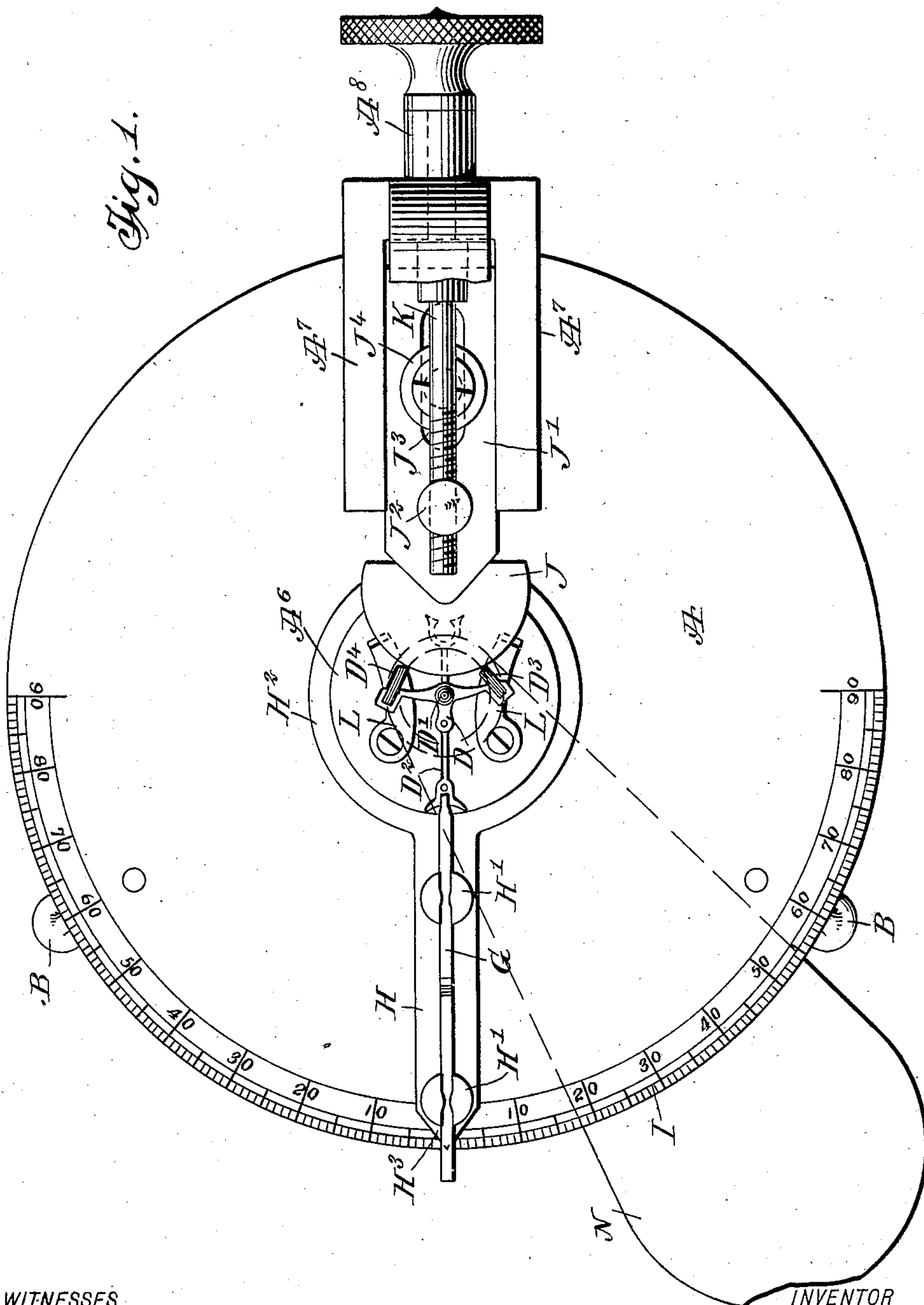


No. 865,925.

PATENTED SEPT. 10, 1907.

L. H. MILLER.
PALLET JEWEL SETTER.
APPLICATION FILED FEB. 23, 1907.

2 SHEETS—SHEET 1.



WITNESSES

L. G. ...
Rev. H. ...

INVENTOR

Louis H. Miller

BY

Mum & Co

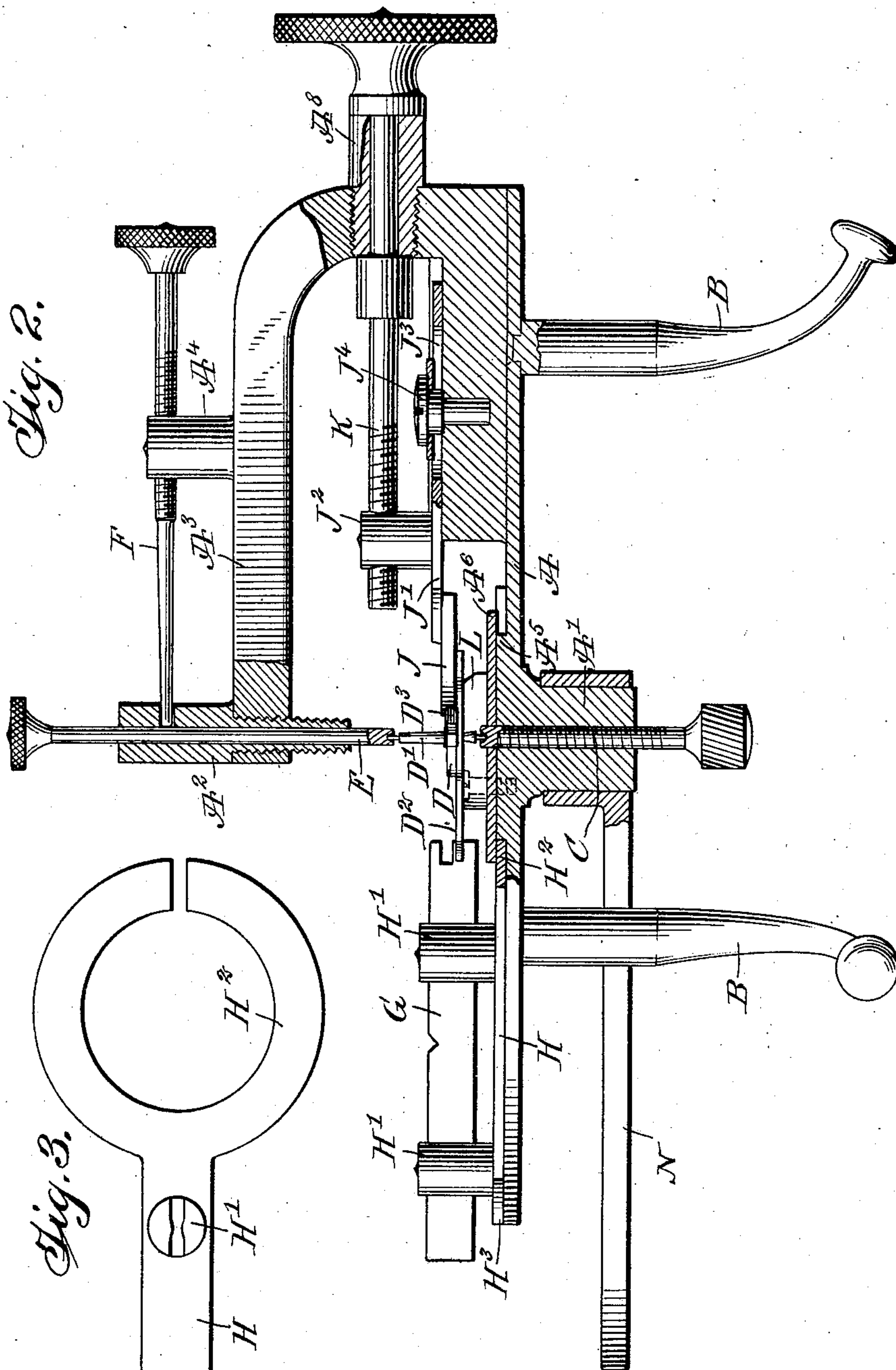
ATTORNEYS

No. 865,925.

PATENTED SEPT. 10, 1907.

L. H. MILLER.
PALLET JEWEL SETTER.
APPLICATION FILED FEB. 23, 1907.

2 SHEETS—SHEET 2.



WITNESSES
L. G. ...
Rev. G. ...

INVENTOR
Louis H. Miller
BY *Mumford*
ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS H. MILLER, OF PORTLAND, OREGON.

PALLET-JEWEL SETTER.

No. 865,925.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed February 23, 1907. Serial No. 358,956.

To all whom it may concern:

Be it known that I, LOUIS H. MILLER, a citizen of the United States, and a resident of Portland, in the county of Multnomah and State of Oregon, have invented a new and Improved Pallet-Jewel Setter, of which the following is a full, clear, and exact description.

The invention relates to watchmakers' tools, and its object is to provide a new and improved pallet jewel setter, arranged to enable the watchmaker to quickly and accurately set the pallet jewels of the pallet.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an enlarged plan view of the improvement. Fig. 2 is a sectional side elevation of the same, and Fig. 3 is an enlarged plan view of the arm for turning the pallet.

The pallet jewel setter is mounted upon a suitably constructed table A provided with legs B and having a depending centrally arranged bearing A', in which screws the threaded spindle C engaging with its upper end the lower end of the arbor D' of the pallet D, the upper end of the said arbor being engaged by the lower end of the spindle E in axial alinement with the spindle C, and loosely mounted to slide in a bearing A² carried by an overhanging arm A³ of the table A. A set screw F screws in a bearing A⁴ attached to the arm A³, and the said set screw is adapted to engage the spindle E, so as to lock the same in place after the pallet D has been moved to a desired position, as hereinafter more fully described.

The fork D² of the pallet D is adapted to be engaged by an arm G held in posts H' erected on an arm H, having a split ring H² mounted to turn on an annular shoulder A⁵ centrally formed on the top of the table A. The ring H² is held in place on the shoulder A⁵ by a disk A⁶, as plainly indicated in Figs. 1 and 2. The arm H terminates in a pointer H³, indicating on a degree scale I secured or formed on the top of the table A at the peripheral edge thereof, as will be readily understood by reference to Fig. 1.

The jewels D⁴ of the pallet D are adapted to be engaged at their free ends by the peripheral edge of a segment J secured on a slide J' mounted to slide longitudinally in suitable bearings A⁷ arranged on the table A. The slide J' is provided with a post J² in which screws a screw rod K mounted to turn in a suitable bearing A⁸ held on the arm A³, the said screw rod permitting of moving the slide J' and consequently the segment J towards and from the jewels D⁴ of the pallet D. The

under side of the pallet D is adapted to rest on arms L pivoted on the disk A⁶, to permit of swinging the arms L under the pallet D or out from under the same whenever desired.

Now in using the device the operator places the arbor D' of the pallet D in position between the spindles C and E, at the time the latter are in a raised position, and then the operator swings the arms L into a receiving position, so that when the spindle C is now screwed downward the pallet D follows together with the spindle E, until the under side of the pallet D rests on the top of the arms L. When this has been done the operator screws up the set screw F, so as to lock the spindle E in place. The fork D² of the pallet D is next engaged with the arm G, and in case one of the jewels D³ or D⁴ be longer than the other, then the arm H is swung from the zero position on the graduation I to the left or right the desired number of degrees, and when this has been done the operator turns the screw rod K so as to move the segment J towards the pallet jewels D³, D⁴ and in engagement with the same, to set the pallet jewels in position on the top of the pallet D. When this has been done shellac or the like is placed on the pallets and warmed by the application of heat until the shellac melts, to secure the pallet jewels D³, D⁴ in place on the pallet D. The heating and melting of the shellac is preferably accomplished by the use of an alcohol lamp heating a plate N secured to the bearing A', so that the heat is transmitted to the shellac by way of the center C and the pallet D.

It is understood that in case the pallet jewels D³, D⁴ are to be of even length, the arm H remains in zero position, but if the pallet jewels are of different length the arm H is swung to the right or to the left from zero position, so that one of the pallet jewels D³ or D⁴ is nearer the peripheral edge of the segment J than the other, and consequently when the segment J is moved up towards the pallet and its peripheral edge engages the pallet jewels, then the latter are adjusted on the pallet the desired degree.

The device shown and described is very simple and durable in construction, and can be readily manipulated to accurately set the pallet jewels as required.

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

1. A pallet jewel setter comprising a support for the pallet arbor, and a segment for peripheral engagement by the ends of the jewels.

2. A pallet jewel setter comprising a support for the pallet arbor, means for turning the pallet, and means for engagement by the pallet jewels.

3. A pallet jewel setter comprising a support for the pallet arbor, a segment for peripheral engagement by the ends of the jewels, and manually controlled means for turning the pallet on its arbor.

4. A pallet jewel setter comprising an adjustable support for the pallet arbor, a turning device for engagement with the fork of the pallet to turn the latter on the said

support, and a segment for peripheral engagement with the ends of the pallet jewels.

5 A pallet jewel setter comprising an adjustable support for the pallet arbor, a turning device for engagement with the fork of the pallet to turn the latter on the said support, a segment for peripheral engagement with the ends of the pallet jewels, and pivoted rests for the pallet to rest on.

10 6. A pallet jewel setter comprising a support for the pallet arbor, a common means for engagement by the pallet jewels, and means for swinging the pallet on the support to properly set jewels of unequal sizes.

15 7. A pallet jewel setter comprising an adjustable support for the pallet arbor, a turning device for reengagement with the fork of the pallet to turn the latter on the said support, a segment for peripheral engagement with the ends of the pallet jewels, and means for moving the segment to and from the said pallet jewels.

20 8. A pallet jewel setter comprising a support for the pallet arbor, a segment for peripheral engagement by the ends of the jewels, manually controlled means for turning the pallet on its arbor, and a graduation for indicating the position of the said turning means.

9. A pallet jewel setter provided with spindles for en-

gaging the ends of the pallet arbor, and a rest for the pallet to rest on when lowering the said spindles. 25

10. A pallet jewel setter provided with alined spindles capable of moving in the direction of their common axis and adapted to engage the ends of the pallet arbor, and pivoted arms adapted to be swung under the pallet for the latter to rest on. 30

11. A pallet jewel setter provided with alined spindles capable of moving in the direction of their common axis and adapted to engage the ends of the pallet arbor, pivoted arms adapted to be swung under the pallet for the latter to rest on, a bar mounted to swing and having its center coinciding with the common axis of the said spindles, the bar engaging the fork of the pallet, and a segment capable of movement toward and from the pallet for the ends of the pallet jewels to abut against the peripheral face of the segment. 35 40

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LOUIS H. MILLER.

Witnesses:

M. A. ZOLLINGER,

E. R. WILCOX.