June 15, 1937. A. J. ANDERSON ET AL 2,084,234

COMBINATION MACHINE STAND

Filed July 13, 1936 2 Sheets-Sheet 1

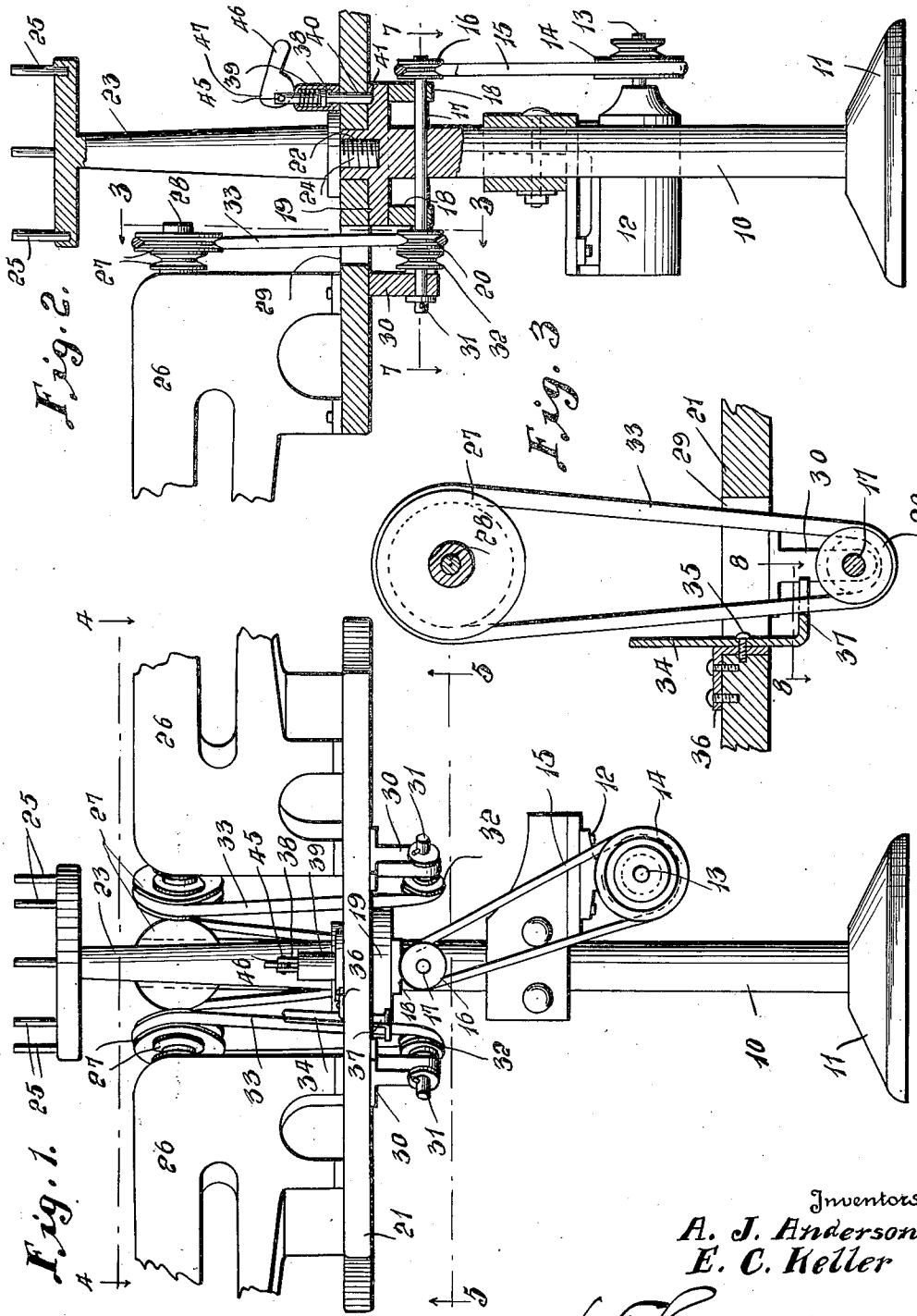


Fig. 1.

Fig. 2.

Fig. 3.

Inventors
A. J. Anderson
E. C. Keller

By L. F. Randolph

Attorney

June 15, 1937. A. J. ANDERSON ET AL 2,084,234

COMBINATION MACHINE STAND

Filed July 13, 1936 2 Sheets-Sheet 2

Fig. 5.

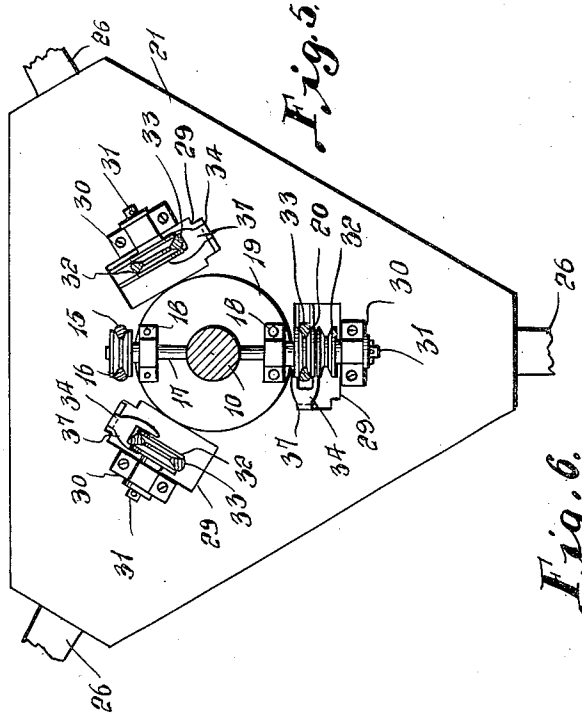


Fig. 8.



Fig. 6.

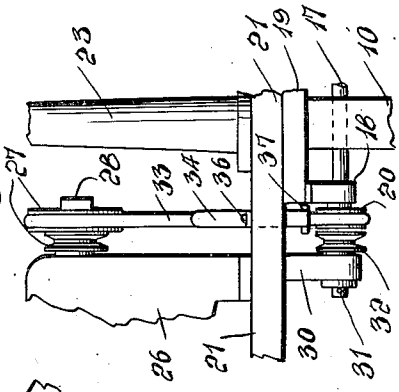


Fig. 4.

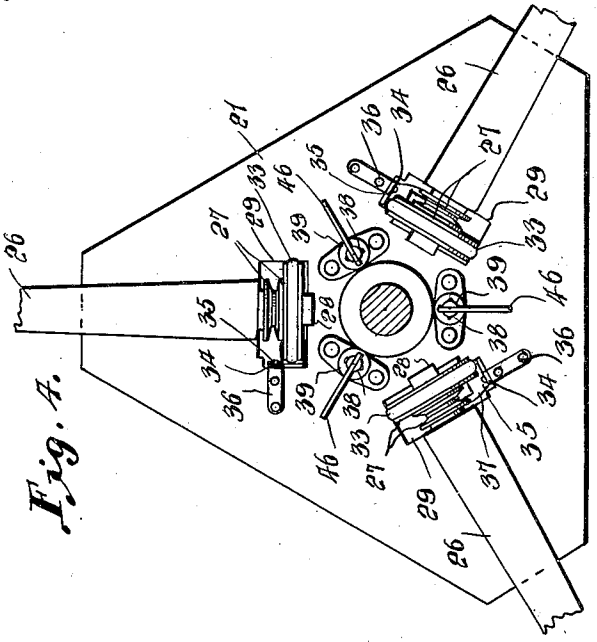
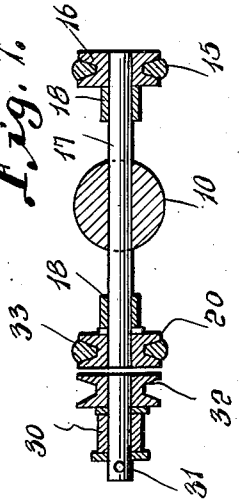


Fig. 7.



Inventors

A. J. Anderson

E. C. Keller

By A. F. Landreth

Attorney

Patented June 15, 1937

2,084,234

UNITED STATES PATENT OFFICE

2,084,234

COMBINATION MACHINE STAND

Alfred J. Anderson and Earl C. Keller,
Susanville, Calif.

Application July 13, 1936, Serial No. 90,446

7 Claims. (Cl. 74—16)

This invention relates to a stand or combination unit adapted to mount a plurality of machines and a common source of operating power with which said machines may be collectively coupled, with a view to providing a very compact unit, and reducing the expense of operating equipment for the machines.

More specifically, it is aimed to provide a stand or pedestal having a motor thereon, on which stand or pedestal, a table is rotatably mounted carrying a plurality of machines, any one of which may be brought into operative relation with the motor or drive means through turning of the table.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with accompanying drawings illustrating an operative embodiment.

In said drawings:—

Figure 1 is a view of the improved combination machine stand in side elevation;

Figure 2 is a fragmentary vertical sectional view through the machine;

Figure 3 is a detail sectional view taken on the line 3—3 of Figure 2;

Figure 4 is a sectional view taken on the line 4—4 of Figure 1;

Figure 5 is a sectional view taken on the line 5—5 of Figure 1;

Figure 6 is a detail elevation illustrating the drive from the countershaft to one of the machines;

Figure 7 is a sectional view taken on the line 7—7 of Figure 2, and

Figure 8 is a detail section taken on the line 8—8 of Figure 3.

Referring specifically to the drawings wherein like reference characters designate like or similar parts, 10 designates a stand or pedestal equipped with a base 11. Suitably mounted on the pedestal 10 is a motor 12, usually an electric motor, although it may be of any desired type, receiving its energy from any preferred source and being controlled in any manner preferred. Said motor 12 has a driven shaft 13 on which one or more pulleys 14 are keyed. Preferably at least two of the pulleys 14 are employed to provide for a change of speed.

Traversing one of the pulleys 14 is a belt 15 in turn trained over a pulley 16 keyed to a countershaft 17 which passes through and is journaled in the pedestal 10 and bearings 18 depending from a crown plate 19 of the pedestal. At its opposite end, said countershaft 17 has a pulley 20 keyed thereto.

Rotably mounted and supported on the crown plate 19 is a table 21 which surrounds a stud 22 rising from the plate 19. A rack or bracket 23 may be detachably screw threaded at 24 to the stud 22 and which rack may have tines 25 on which spools containing thread may be arranged.

Said table 21 supports, preferably equidistantly, a plurality of machines 26. These machines are rigidly secured to the table and for example may be sewing machines, each adapted to operate differently, that is being of a different type.

It is obvious however that sewing machines are suggested by way of example only since any machines or elements to be operated are contemplated by the invention.

Each machine 26 has a plurality of pulleys 27 on its operating shaft 28, providing for a change of speed, if desired. Below the pulleys 27, the table 21 is provided with openings 29 therethrough and depending from the table adjacent each opening is a bearing 30 in which a stub shaft 31 is mounted and on which a pulley 32 is journaled, it being realized that each of the stub shafts is radially disposed with respect to the center of the pedestal 10. Each machine or unit 26 has a belt 33 trained over one of its pulleys 27 and trained over the associated pulley 32. In this condition, the table 21 may be rotated to aline either of the shafts 31 with the shaft 17, according to the machine 26 which it is desired to drive or operate from the motor. When the machine 26 is in the said position, its belt 33 may be shifted from the pulley 32 onto the pulley 20 and hence the machine will be operated from the motor, through belt 15, pulley 16, shaft 17, pulley 20, and its associated belt 33 and pulley 27 engaged thereby. Any of the machines 26 may selectively be used by engaging its belt 33 with the pulley 20, following appropriate turning of the table 21.

Means are provided for shifting the belts 33 to and from the pulleys 20 and 32. For instance a belt shifter 34 in the form of a lever, may be disposed in each opening 29, being pivoted at 35 to a bracket 36 secured therein. Each belt shifter 34 extends above the table 21 to provide a handle and below such table has a lateral bifurcated portion 37 through which the belt passes, as best shown in Figure 8.

Means are provided whereby the table 21 may be latched in any of its positions alining the shafts 31 and shaft 17.

For instance, three equidistantly spaced latch

members or pins 38 are slidably mounted in brackets 39 on the table and in registrable openings 40 in the table and sockets 41 in the upper surface of the crown plate 19. The pins or latches 38 are urged downwardly by means of expansive coil springs 42 abutting shoulders 43 on the latch pins 38 and the inturned ends 44 of the brackets 39. Said pins at 45 are pivoted to cam levers 46 whose cams 47 are engageable, through depression, with the upper ends of the brackets 39 to elevate the pins 38 out of the recesses 41, so that the table 21 may be turned. When the levers 46 are swung to a vertical position, the springs force the latch members 38 downwardly into the recesses 41. A single latch device may be employed or a plurality as shown, as desired.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

We claim as our invention:—

1. Apparatus of the class described comprising a stand having power means thereon, a table movably mounted on said stand, devices to be operated mounted on said table, and means to connect and simultaneously drive the first mentioned means and said devices collectively adapted to be arranged in proximity through movement of the table.

2. Apparatus of the class described comprising a stand having power means thereon, a table movably mounted on said stand, devices to be operated mounted on said table, and means to connect and simultaneously drive the first mentioned means and said devices collectively adapted to be arranged in proximity through movement of the table, a crown plate on the table supporting the table, and means operable to latch the table to the crown plate.

3. Apparatus of the class described comprising a stand having a driven shaft, a pedestal on which the driven shaft is mounted, a table movably disposed on the pedestal, a plurality of devices to be driven simultaneously from said shaft, said devices being mounted on said table, driving means for each device adapted to be positioned relatively to the shaft through turning of the table, and means for driving engagement of said driving means with said shaft.

4. Apparatus of the class described comprising a pedestal, a driven shaft thereon, a table journaled on the pedestal, devices to be driven, said devices being mounted on the table, belts, a belt being in driving engagement with each device, and a pulley on said shaft selectively engageable by said belts.

5. Apparatus of the class described comprising a pedestal, a driven shaft thereon, a table journaled on the pedestal, devices to be driven, said devices being mounted on the table, belts, a belt being in driving engagement with each device, and a pulley on said shaft selectively engageable by said belts, idler pulleys on the table, one for each belt, and means to shift each belt from its idler pulley to the pulley on said shaft and vice versa.

6. Apparatus of the class described comprising a pedestal, a driven shaft thereon, a table journaled on the pedestal, devices to be driven, said devices being mounted on the table, belts, a belt being in driving engagement with each device, and a pulley on said shaft selectively engageable by said belts, idler pulleys on the table, one for each belt, and means to shift each belt from its idler pulley to the pulley on said shaft and vice versa, said table having openings through which the belts depend, bearings depending from the table adjacent the openings, stub shafts mounted in the bearings and on which the idler pulleys are journaled.

7. Apparatus of the class described comprising a pedestal, a driven shaft thereon, a table journaled on the pedestal, devices to be driven, said devices being mounted on the table, belts, a belt being in driving engagement with each device, and a pulley on said shaft selectively engageable by said belts, idler pulleys on the table, one for each belt, and means to shift each belt from its idler pulley to the pulley on said shaft and vice versa, said table having openings through which the belts depend, bearings depending from the table adjacent the openings, stub shafts mounted in the bearings and on which the idler pulleys are journaled, a crown plate on the pedestal supporting the table, a hub rising from the crown plate through the table, means to latch the table to the crown plate, a prime mover on the pedestal, and means to drive said shaft from the prime mover.

ALFRED J. ANDERSON.
EARL C. KELLER.