C. McK. ARRANTS.

MULTIPLE MACHINE TABLE.

APPLICATION FILED SEPT. 25, 1915.

1,200,407. Patented Oct. 3, 1916.

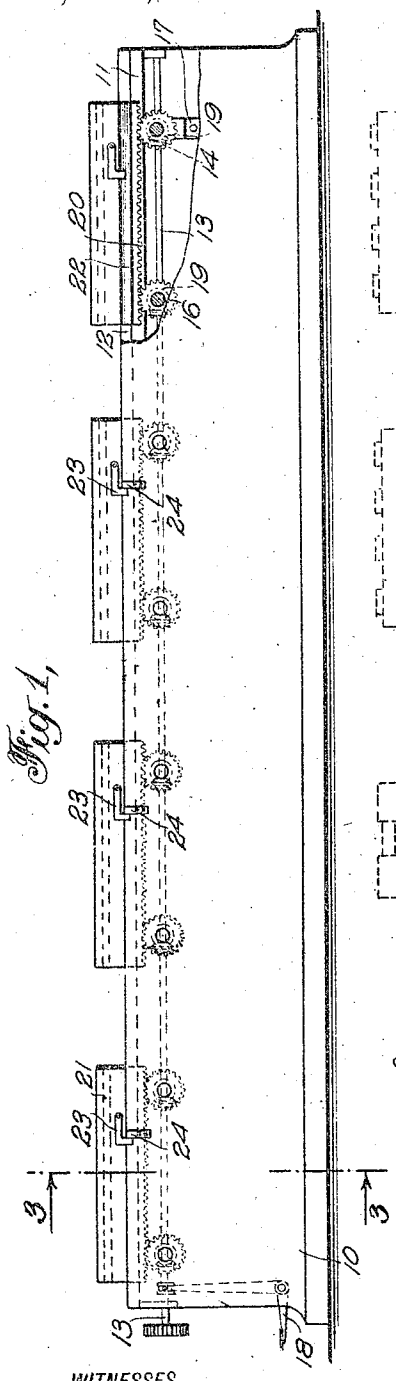


Fig. 1.

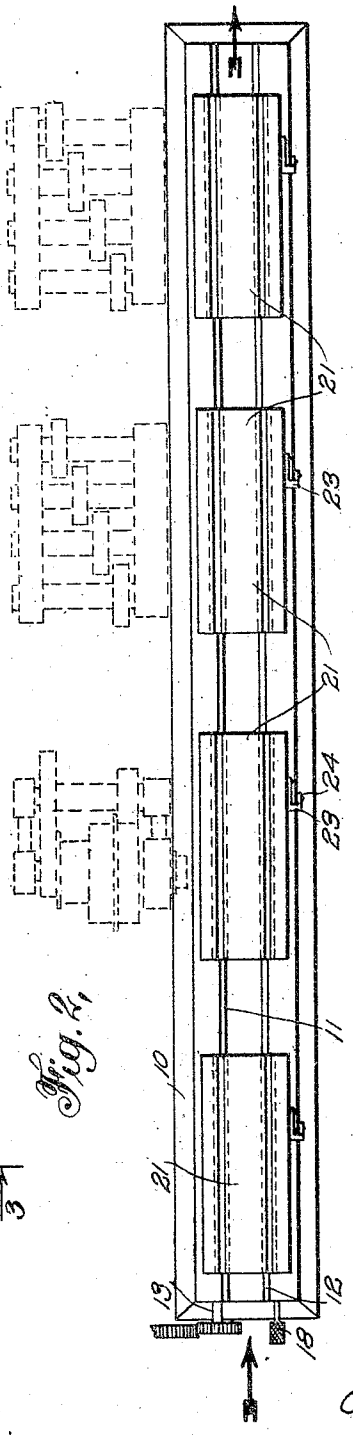


Fig. 2.

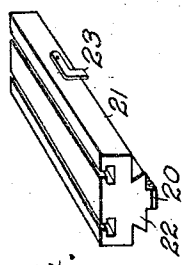


Fig. 4.

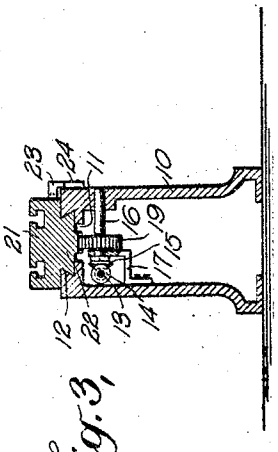


Fig. 3.

WITNESSES

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MULTIPLE MACHINE-TABLE.

1,200,407. Specification of Letters Patent. Patented Oct. 3, 1916.

Application filed September 25, 1915. Serial No. 52,575.

To all whom it may concern:

Be it known that I, CHARLES M. ARRANTS, a citizen of the United States, and a resident of Piney Flats, in the county of Sullivan and State of Tennessee, have invented a new and Improved Multiple Machine-Table, of which the following is a full, clear, and exact description.

This invention relates to machine shop appliances and has particular reference to machine shop tables.

Among the objects of the invention is to provide a means whereby a job may be clamped in the rough to a table or platform and moved thereon from one place to another, or from one machine to another, for the operation thereon of various processes, without necessitating the loosening of the job and re-attaching it to another support.

Another object of the invention is to provide a main support along which a series of independently movable tables may be operated, under the control of a single operator, for the purpose of bringing such tables severally into position for a particular portion of the work.

With the foregoing and other objects in view the invention consists in the arrangement and combination of parts hereinafter described and claimed, and while the invention is not restricted to the exact details of construction disclosed herein, still for the purpose of illustrating a practical embodiment thereof reference is had to the accompanying drawings, in which like reference characters designate the same parts in the several views, and in which—

Figure 1 is a side elevation of the invention; Fig. 2 is a plan view of the same; Fig. 3 is a transverse vertical section on the line 3—3 of Fig. 1; and Fig. 4 is a detail perspective view of one of the tables.

Referring more particularly to the drawings, I show at 10, a main support of any suitable construction but of a rigid nature and having a hollow interior and a central longitudinal slot 11 along its top. The top portion of this support adjacent the slot 11 is dovetailed as indicated at 12.

Within the interior of the support 10 is a longitudinal power shaft 13 having secured thereon a plurality of bevel pinions 14 meshing with corresponding pinions 15 mounted upon short transverse shafts 16 journaled in one side wall of the main support and in brackets 17 secured to the other side wall. The power shaft 13 may be adjusted longitudinally by means of bell crank or a similar device 18 so as to bring all of the pairs of bevel pinions into or out of mesh simultaneously. In other words, while the power shaft may be operated continuously the shafts 16 may all be driven simultaneously upon shifting the pinions 14 into mesh with the gears 15. On each of the short shafts 16 is mounted preferably frictionally a spur gear 19 meshing or adapted to mesh with a rack 20 extending along the bottom of each work table 21. For each main support 10 I provide a plurality of these individual work tables 21 all of which may be of the same character and interchangeable but in practice intended to have attached thereto a job to be operated upon by the different machines for the same or different purposes depending upon the character of the job, for illustration, an automobile cylinder may be clamped to the table 21 and while thus clamped may be treated at different positions along the main support for milling off on the end, rough bored, finished, reamed and drilled for bolts, these different operations being performed in turn by different operators along the line of the support. Each table 21 has a tongue 22 operated in the dovetail 12, above mentioned.

Each table carries a movable catch such as indicated at 23 for engagement with the stop lug 24 on the stationary support, whereby such table will be stopped automatically when it reaches the proper position adjacent the tool or machine, different types of which are indicated in dotted lines in Fig. 2. The gears 19 being connected frictionally to the shafts 16 insure that no damage will result to the power mechanism if the rotation thereof is not stopped when the catches engage the stops or in the event that any of the tables should encounter an obstruction. The several workmen along the support 10 when their several duties are performed on as many jobs will release the catches 23 permitting all of the tables to progress one step, so that the next operation may be performed on the several jobs. The several operators, however, will be relieved from the trouble of clamping the jobs to their tables, the clamping being done initially and in a uniform manner upon the several tables 21 before they enter the main line of operation. When the table leaves the support 10 the work being per-

formed upon the job, such job will be removed and the table will be free for attachment of a new job in the rough and to be started at the head of the line again.

I claim—

The combination of a support adapted to be arranged adjacent a plurality of machines each of which is adapted to perform a different operation, work tables mounted to travel on the support from one end thereof to the other, power means for operating the tables, and means for successively and automatically stopping the tables opposite the several machines, whereby provision is made for performing various operations on the work carried by the tables.

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

CHARLES McKINLEY ARRANTS.

Witnesses:
SAM R. WOLFE,
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