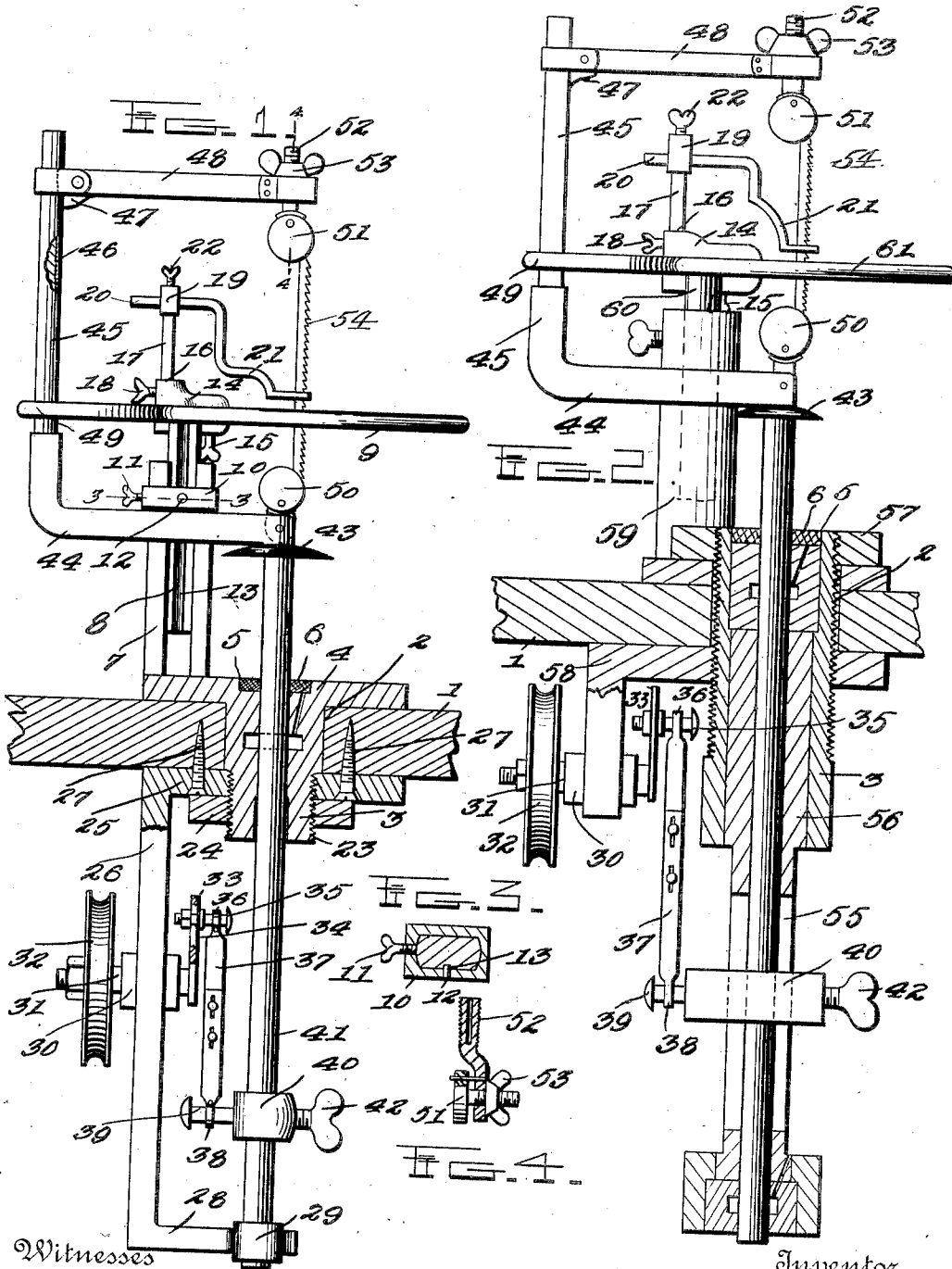


M. SPORLEDER.  
 SAWING OR FILING MACHINE.  
 APPLICATION FILED JUNE 26, 1913.

1,116,640.

Patented Nov. 10, 1914.



Witnesses  
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# UNITED STATES PATENT OFFICE.

MICHAEL SPORLEDER, OF COLORADO CITY, COLORADO.

SAWING OR FILING MACHINE.

1,116,640.

Specification of Letters Patent.

Patented Nov. 10, 1914.

Application filed June 26, 1913. Serial No. 775,910.

To all whom it may concern:

Be it known that I, MICHAEL SPORLEDER, a citizen of the United States, residing at Colorado City, in the county of El Paso and State of Colorado, have invented certain new and useful Improvements in Sawing or Filing Machines, of which the following is a specification.

My invention relates to improvements in sawing or filing machines, one object being the provision of a machine which can be operated by foot or other power and be capable of use either for sawing or filing and prove entirely efficient for either purpose.

Another object of my invention is the provision of a machine which will dispense with the use of a special stand or support and be capable of use in connection with a bench or table, according to conditions.

Another object of my invention is the provision of a machine of the character and for the purpose stated which will be capable of every adjustment desired to accommodate the machine to the work as well as conditions.

Another object of my invention is the provision of a machine which will comprise few parts insuring durability and inexpensiveness of production as well as freedom from getting out of order; which can be easily applied or removed; and which will be small and compact in size and in every respect be thoroughly efficient and practical.

To attain the desired objects my invention consists of a machine of the character and for the purpose stated, embodying novel features of construction and combination of parts for service substantially as disclosed herein.

In order that the detailed construction and the operation of my machine may be fully understood and its many advantages be fully appreciated I have illustrated in the accompanying drawings two forms of a machine embodying my improvement.

Figure 1 represents a side elevation partly broken away or in section of one form of my invention. Fig. 2 represents a similar view of another or modified construction of my improvement. Fig. 3 represents a sectional view on line 3—3 of Fig. 1, and Fig. 4 represents a sectional view on line 4—4 of Fig. 1.

Referring by numerals to the drawings in which similar characters of reference denote corresponding parts in the several views:

The numeral 1, designates a bench or table in connection with which my machine is used, being provided with an opening 2, to receive the depending tubular portion 3, of the bed plate 4, having a recess 5, in which fits a packing or cushion 6, and from the bed plate rises the hollow standard 7, in which fits the depending arm 8, formed upon the work table or support 9, the said arm with its work table being retained in the proper vertical adjustment by means of the collar 10, having a binding screw 11, and formed with a guiding pin 12, fitting in the slot 13, of the depending arm.

From this construction it will be observed that I provide a bed plate which fits and is seated in an opening of the table or bench and that the bed plate is formed with the hollow upright in which the work table is vertically adjustable, and to the work table is secured the clamp 14, by means of the binding screw 15, and upon its upper side the clamp is formed with a socket 16, which receives the lower end of the post 17, retained in the clamp by the binding screw 18, the post being formed at its upper end with a collar 19, in which fits the shank 20, of the saw or file guiding arm 21, said guiding arm being retained in proper adjustment in the post by means of the binding screw 22.

The depending tubular portion of the bed plate is formed with screw threads 23, with which engages the clamping nut 24, bearing upon the arm 25, of the bracket 26, which arm fits or is screwed upon the threads of said tubular portion and is retained in the bench or table by its threaded connection as well as by the screws 27, passing through the arm of the bracket into the bench. The depending bracket is formed at its lower end with an arm 28, having a sleeve or bearing 29, the purpose of which will presently appear and is further provided at an intermediate point with a bearing box 30, in which bears the stud or short shaft 31, carrying at one end the grooved driving pulley 32, and at its other end the crank arm 33, to which in the slot 34, is secured the pin 35. To the pin 35, is connected the hooked end of the two part adjustable pitman 37, having its lower hooked end 38, connected to the pin 39, on the collar 40, said collar fitting upon the vertical rod 41, and retained upon and movable with said rod by means of the set screw 42, the rod by means of its connections having a reciprocating move-

ment in the depending tubular portion of the bed plate and in the sleeve or bearing 29, of the depending bracket.

From this construction it will be apparent that rotation of the grooved pulley revolves the stud with the crank arm imparting a reciprocation to the vertical rod, and to the upper end of the rod is secured the disk 43, which serves to force the saw dust or foreign matter away from the bed plate after the manner of a fan, and to the rod adjacent the disk is secured the angle arm 44, in which is secured the post 45, having upon one face the teeth 46, with which engages the dog or detent 47 carried by the arm 48, this construction permitting the adjustment of said arm upon the post to suit the character of work as well as the length of the saw or file. The reciprocating rod thus carries a yoke shaped frame the post of which moves vertically through a guide portion 49, of the work table with its upper arm adjustable and for the purpose of securing the file or saw in the yoke shaped frame I provide the lower clamping device 50, secured upon the vertical rod, and the upper clamping device 51, which is adjustable in the upper arm of the frame by means of the threaded stem 52, and the adjusting nut 53, the construction of the clamping devices being shown in Fig. 4, and being substantially the device in general use, the saw or file 54, being clamped between the upper and lower clamping devices and passing through the work table and guided by the guiding arm.

In the modified construction practically the same construction is used except that the reciprocating rod is guided in a depending bracket 55, fitting in a sleeve 56, threaded into the bed plate 57, and bracket 58, which carries the operating means, and from the bed plate rises the tubular post 59, in which fits and is adjustable the tubular post 60, upon which is mounted the work support 61.

The operation of my machine will be readily understood from the drawings and description and I would state that the machine is mounted upon the bench or table and connected with a foot treadle or other source of power and that revolution of the pulley imparts a reciprocating movement to the rod which reciprocates the frame with its saw or file and accomplishes the work of sawing or filing.

It will be understood that my machine will require little power to attain the finest results, will occupy a small amount of space insuring easy application or transportation, also that every desired adjustment to suit the character of work can be instantly obtained and that from every standpoint the machine will prove efficient and practical.

I claim:

1. In a sawing or filing machine, the combination of a bed plate formed with a tubular guiding portion, a reciprocating rod guided in said tubular portion, operating means connected with said rod, a hollow post rising from the bed plate, a work support or table adjustably mounted in said hollow post, and a frame connected with the reciprocating rod and having means for securing a saw or other implement.

2. In a sawing or filing machine, the combination with a support, a bed plate mounted therein, means depending from said plate and support, driving means carried by said depending means, a reciprocating rod mounted in the bed plate and connected with the operating means, a frame carrying an implement and having one member adjustable, a work support having a depending adjustable arm, and a guide mounted upon the work support.

3. In a sawing or filing machine, the combination of a support, a bed plate having a depending tubular guide fitting in said support, a bracket clamped upon the tubular guide, driving mechanism mounted in said bracket, a rod connected with said driving mechanism and adapted to reciprocate in said guide, and an implement carrying frame connected to said rod.

4. In a sawing or filing machine the combination of a support, a bed plate having a tubular guide fitting in said support, a rod fitting in said guide, a frame secured to the upper end of the rod, an implement carried by the frame, a work table adjustable upon the bed plate and having a guide for the frame, and means for reciprocating the rod with frame, said means being supported from the depending portion of the tubular guide.

5. In a sawing or filing machine, the combination of a support having an opening, a bed plate having a depending tubular portion fitting in said opening and provided with exterior screw threads, a bracket having a threaded upper arm to engage the threads on the said tubular portion and having a lower arm formed with an opening, a rod mounted in the tubular guide and opening of the lower arm, a driving mechanism mounted in the bracket and connected with said rod and an implement-carrying frame connected with the rod.

In testimony whereof I affix my signature in presence of two witnesses.

MICHAEL SPORLEDER.

Witnesses:

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HENRY ELLITHORPE.