W. J. McSORLEY & J. W. SCOTT.

SAWING MACHINE.

APPLICATION FILED AUG. 21, 1911.

1,067,360.

Patented July 15, 1913.

4 SHEETS—SHEET 1.

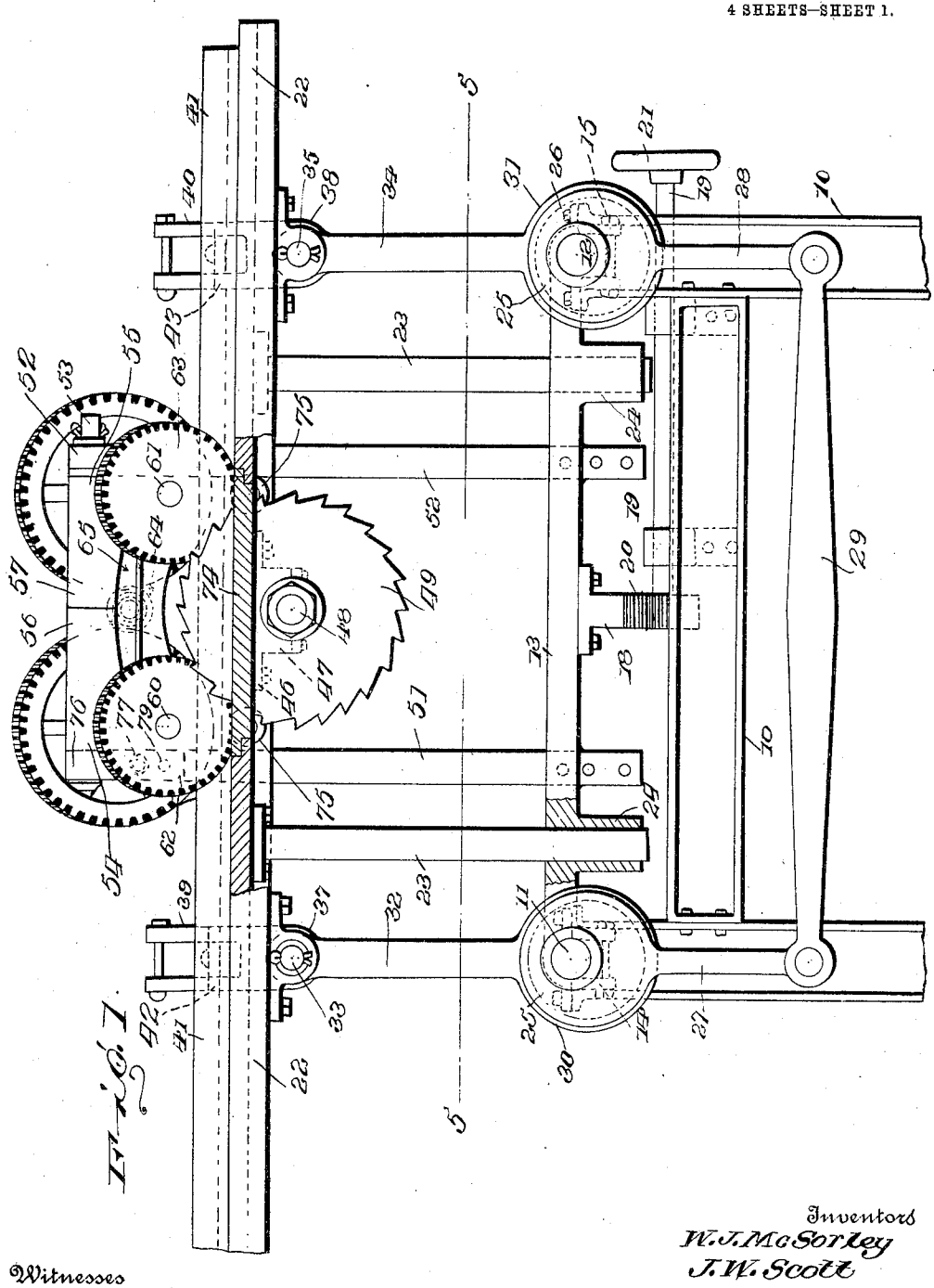


Fig. 1.

Witnesses

Cora M. Handy.

Juana M. Fallin.

Inventors

W. J. McSorley

J. W. Scott

By

Attorneys.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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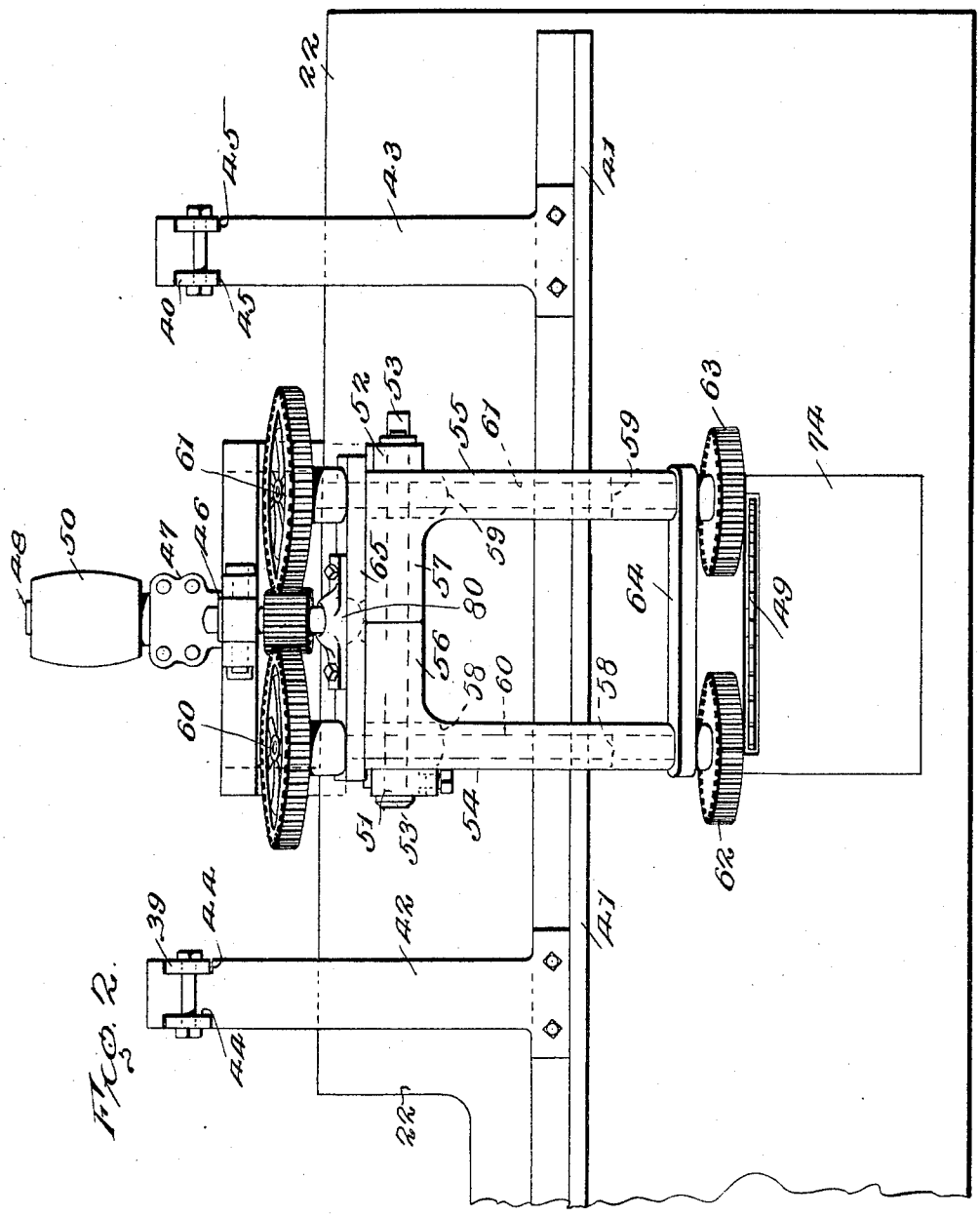


FIG. 2.

Inventors

W. J. McSorley

J. W. Scott

Witnesses

Cora M. Handy.

Juana M. Fallin.

By H. A. Macy, Attorneys.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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4 SHEETS—SHEET 3.

FIG. 4.

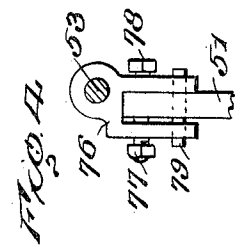
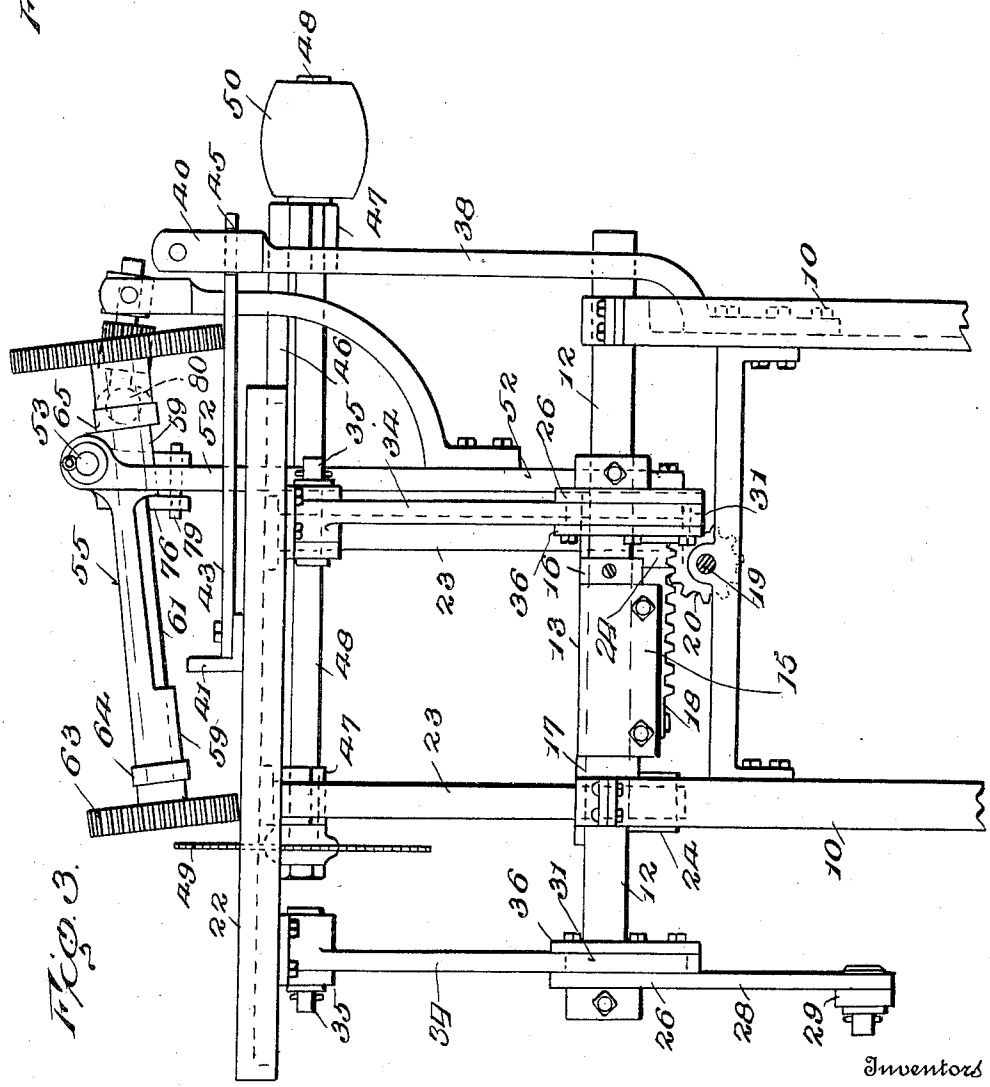


FIG. 3.



Witnesses

Cora K. Handy.

Juana M. Fallin.

Inventors

W. J. McSorley

J. W. Scott

By H. A. Stacy, Attorneys

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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4 SHEETS—SHEET 4.

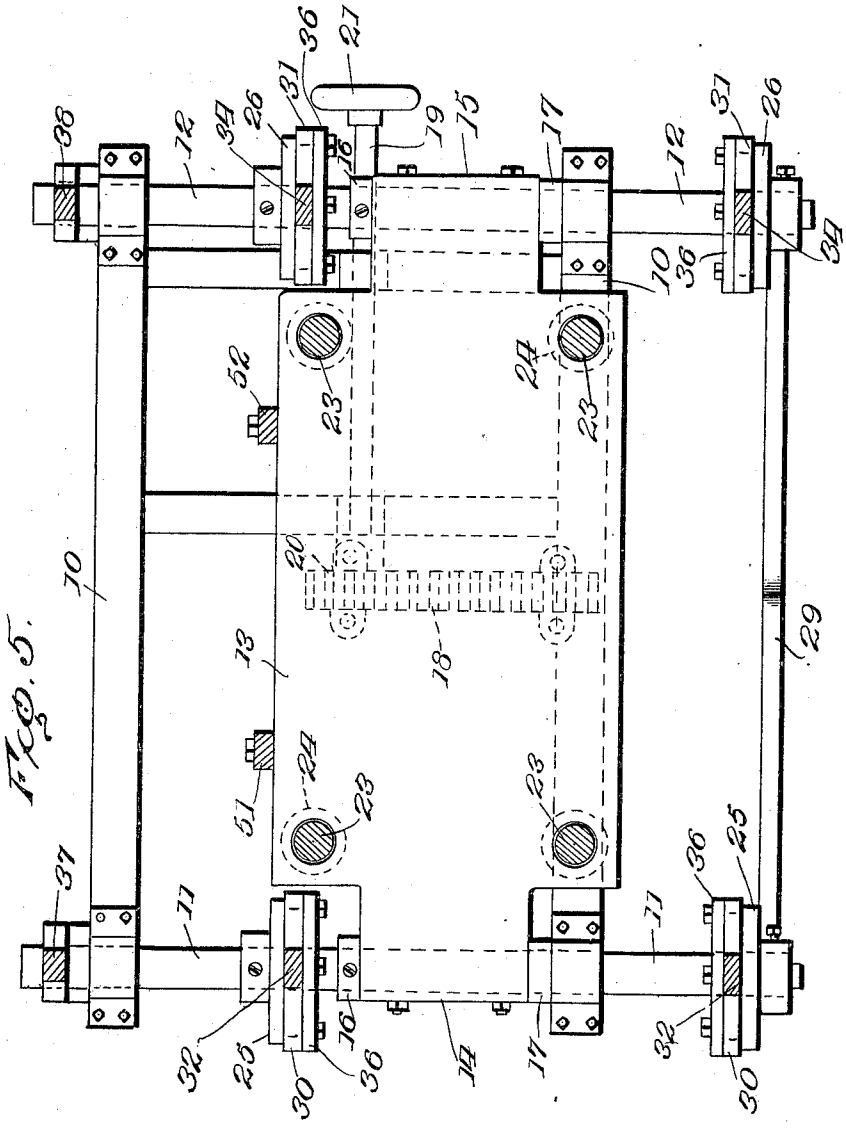


FIG. 5.

Witnesses

Cora M. Handy.

Juana M. Fallin.

Inventors

W. J. McSorley

J. W. Scott

By Stacy & Stacy, Attorneys.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM J. McSORLEY AND JOHN W. SCOTT, OF EAU CLAIRE, WISCONSIN.

SAWING-MACHINE.

1,067,360. Specification of Letters Patent. **Patented July 15, 1913.**

Application filed August 21, 1911. Serial No. 645,234.

To all whom it may concern:

Be it known that we, WILLIAM J. McSORLEY and JOHN W. SCOTT, citizens of the United States, residing at Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented certain new and useful Improvements in Sawing-Machines, of which the following is a specification.

This invention relates to improvements in sawing machines, more particularly to devices of this character employed in connection with stickers, molding machines, surfacers, jointers, and similar machines for the purpose of "sizing" the material preparatory to its being fed to the various machines noted, and has for one of its objects to simplify and improve the construction and increase the efficiency and utility of devices of this character.

Another object of the invention is to provide a device of this character wherein the saw table is adjustable vertically and laterally to enable it to be more readily employed in connection with the machines above noted.

With these and other objects in view, the invention consists in certain novel features of construction as hereafter shown and described and then specifically pointed out in the claims, and in the drawings illustrative of the preferred embodiment of the invention: Figure 1 is a side elevation partly in section of the improved machine; Fig. 2 is a plan view of the same; Fig. 3 is an end elevation; Fig. 4 is a sectional detail; Fig. 5 is a section on the line 5—5 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawings by the same reference characters.

The improved device, as before stated, is designed more particularly for use in connection with various machines for "sizing" the material preparatory to feeding thereto, but may be employed as an individual machine or "sizing" saw, and it is not desired therefore to limit the use of the machine in any manner, and as the various machines with which the improved apparatus is adapted to be employed form no part of the present invention, they are not illustrated.

The improved machine includes a supporting frame represented as a whole at 10 and which may be constructed of any suitable material and of any required design, and includes in its construction bearings to receive two shafts 11—12, the shafts being mounted for rotation upon the frame and likewise for longitudinal movement in the bearings. Bearing upon the shafts 11—12 is a platform 13, the platform being suitably connected to the shafts as for instance by bearings 14—15. The platform is so coupled to the shafts as to permit the latter to freely rotate relative to the platform, but held from longitudinal movement by stop collars 16—17 or other suitable holding devices.

Connected to the under face of the platform is a gear rack 18, and mounted for rotation upon the frame 10 is another shaft 19 having a pinion 20 at its inner end engaging with the rack 18 and with a turning wheel 21 at its outer end externally of the frame. By this means it will be obvious that when the shaft 19 is rotated by power applied to the wheel 21, the platform 13 will be moved laterally together with the shafts 11—12 which are thereby caused to slide through the bearings of the frame 10. The saw table is represented conventionally at 22 and may be of any suitable size and of any suitable material and is provided with a plurality of downwardly directed guide rods 23 which operate through guide sleeves 24 depending from the platform 13. The sleeves 24 are relatively long to provide the requisite support to the guide rods and thus provide the requisite support for the table. The table is thus movable vertically to any required extent within the range of the rods 23 and the guide sleeves 24, while at the same time movable laterally with the platform 13 as hereafter explained.

Connected to the shaft 11 are two cams or eccentrics 25, while similar cams or eccentrics 26 are connected to the shaft 12. One of the cams 25 is provided with a depending arm 27, while a similar arm 28 depends from one of the eccentrics 26. The arms 27—28 are connected by a coupling rod 29 as shown. Each of the cams 25 is surrounded by a strap 30, while a similar strap 31 surrounds each of the cams 26. Each of the straps 30 is provided with an upwardly directed arm 32 pivoted at 33 to the table 22, while each of the straps 31 is provided with an upwardly directed arm 34 pivoted at 35 to the table. By this simple means it will be obvious that the eccentrics 25 may be arranged in their lower position by disposing the rod 29 at its lowest point, as shown in Fig. 1, and then

by moving the rod forwardly or backwardly the cams will be caused to adjust the table vertically to any required extent within the range of movement of the cams, the table being retained in parallel relations to the platform 13 by the co-action of the guide rods 23 and the sleeves 24. The eccentrics are each provided with a holding plate represented at 36 to retain them in operative position.

Connected to the frame 10 at the rear side are standards 37—38 spaced apart and each forked at the upper end as represented at 39—40. Bearing upon the upper face of the table 22 is a relatively long gage 41 provided with rearwardly extending arms 42—43, the arm 42 having recesses 44 in its side edges while similar recesses 45 are formed in the side edges of the arm 43. The material between the recesses of the arms is designed to engage in the forked portions 39—40 of the standards 37—38 and retained in position relative thereto during the vertical movement of the table while at the same time holding the gage in the same position relative to the frame 10 irrespective of the position to which the table may be adjusted. The slotted portions 39—40 will be of sufficient length to enable the gage to retain its position upon the table at all times during the adjustment of the table.

Connected to the under side of the table 22 is a supporting plate 46 having bearings 47 at the ends for receiving the mandrel 48 of the saw, the latter being represented at 49 and secured to the mandrel in the usual manner. The mandrel 48 extends rearwardly of the table 22 and is provided with the usual belt pulley 50. Connected to the platform 13 are vertical supporting members 51—52 which extend through suitable apertures in the table 22 and are connected at their upper ends by a rod or shaft 53. Mounted to swing upon the shaft 53 are arms 54—55, the arms having laterally extending heads 56—57 where they engage the shaft. The arm 54 is provided with bearings indicated at 58 while similar bearings 59 are connected to the arm 55. Mounted for rotation in the bearings 58 is a shaft 60, while a similar shaft 61 is mounted for rotation in the bearings 59. The shafts 60—61 are provided respectively with fluted or serrated feeding and presser rollers 62—63 at their inner ends and provided with a separating or spacing bar 64 adjacent to the bearing rollers, while a similar separating or spacing bar 65 is connected to the shafts rearwardly of the "heads" 56—57.

The table 22 adjacent to the saw 49 is provided with an opening which is filled by a suitable throat plate 74, the upper face of the throat plate coming flush with the upper face of the table. By this means ready access to the saw is possible when the latter is to be removed from or attached to its mandrel. Bed rollers 75 of the usual form are inserted in the table beneath the centers of the rollers 62—63. At its upper end the supporting member 51 is provided with a head 76 to receive the adjacent end of the shaft 53 and forked at its lower end to bear over the member 51. The member 76 is adjustably coupled to the member 51 by clamp screws 77—78 and a guide pin 79, so that the shaft 53 may be adjusted laterally when required.

When the improved device is employed in connection with other machines as stickers, molding machines, and the like, the machine will be moved to a position adjacent to the feed end of the sticker or other machine and the table 22 adjusted vertically by actuating the connecting member 29 to bring the upper face of the table level with the upper face of the table of the sticker or other machine, and the rod 19 actuated to bring the space between the gage 41 and the saw 49 opposite the cutter head of the sticker or other machine so that the material after passing the saw will be conducted direct to the other machine. By this means a material saving in time and expense is attained, as the material after being "sized" is fed directly to the other machine without the necessity for rehandling. When the improved machine is to be employed in connection with one machine only such as a sticker, molding machine, or the like, the frame 10 may be fastened permanently to the floor, but when the machine is designed to be employed in connection with several different machines the frame is left unfastened so that the machine may be moved from place to place as required.

The improved apparatus is simple in construction, can be substantially manufactured and will save much time and labor and reduce the expense in handling the material, and is readily adapted to operate upon material of varying thicknesses and width by simply adjusting the table, as will be obvious.

What we claim is:—

1. The combination of a supporting frame, axially movable shafts journaled in said frame, a platform supported by said shafts and connected therewith so as to follow the axial movement of the same, a table carried by said platform, and means controlled by the shafts for adjusting said table vertically.

2. The combination of a supporting frame, axially movable shafts journaled in said frame, a platform carried by said shafts and held against movement longitudinally thereof, a table carried by said platform, and means acting on the platform to move the shafts axially.

3. The combination of a supporting

frame, a platform mounted within the frame, a table carried by said platform, a saw mounted on the table, a gage carried by the platform and extending over the table, and means acting on the platform to move the same and the table laterally to vary the distance between the saw and the gage.

In testimony whereof, we affix our signatures in presence of two witnesses.

WILLIAM J. McSORLEY. [L. S.]
JOHN W. SCOTT. [L. S.]

Witnesses:
B. F. HEADLEY,
F. E. HALL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."