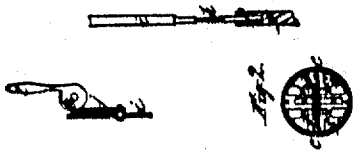
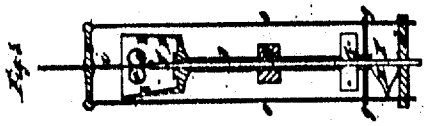
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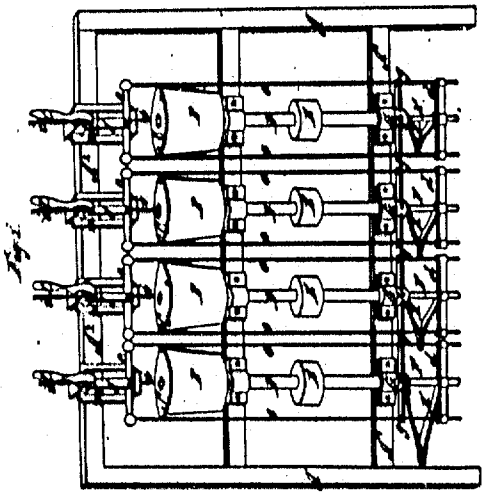
W. Keane.

Swaging Screws

Patented Feb. 13, 1836







THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

{Reissued April 16th 1861.} Feb'y 13. 1860 429

William Keane Mount N. Y.

9398X

Sellers Patent

The Schedule referred to in these Letters Patent and making part of the same
Containing a description in the words of the said William Keane himself
of his improvement in the Machine for making Screws.-

Be it known that I William Keane of the Town of Mount County of Orange
and State of New York have invented a new and useful improvement in
the Machine for making Screws which is described as follows: reference
being had to the annexed drawings making part of this Specification. A
represents the frame of the Machine B.B. the Cylinder Dies having in
the periphery of the required Screw-thread their peripheries. These dies
are about 10¼ inches diameter & ½ inch thick, made of cast steel hard
generally but with their edges annealed they form a
circular cavity into which the taps are inserted for giving the required impression
to the dies. The dies have a dovetail hole in their centre into which a
shaft is inserted C.C. 2½ inches long and upon the centre of which shafts
the dies are fixed. These shafts with the dies revolve on centres D.D.
fixed by means of bolts E.E.E. in a circular plate F. The shafts are placed
parallel with each other so that the centres in the dies form a circle which
circle is concentric with the centre of the iron plate F. and the screw shown being cut
forms the centre upon which the dies perform a horizontal revolving motion
and on the thread on the screw as the spindle, screw or work intended is
forced upwards the dies & work are immersed in water and
set in motion by power Handscrew and dies becoming hot for which purpose
I have constructed a box G 7 inches by 4 inches by 5 inches diameter
cast with a bottom, thro' which the spindle passes and a cross H. having
an aperture in its centre thro' which passes the centre rod I. Union spindle
K 2 feet long. In which diametrically opposite each other through its
centre lengthwise standing vertically & having a bearing at the bottom
and another near the top both a part by S. near the centre by which

A is driven Projectile the Cylindrical hollow air Boat by Patent
Cog Wheels and is thus fashioned. The Spindle being hollow as before men-
tioned has passed thro' its Centre an iron rod S. having a Nut screw
C. at the top to govern the Vice, and is connected to a Lever B. which bears
up the Centre rod and keeps the Work screw Pinion Thrysie and Propeller
Wheel in Gear which is intended to receive a thread P. Lever Connected
to the bottom of the Spindle and supports it; being Connected to the lower
end of a Lever C. The Lever B has a Weight A. on it to counterbalance for the Purpose
of bearing the Spindle upwards as the screw is Cut. The handle S at the
top of this Lever is for bringing the Spindle down and for the purpose of taking
the finished screw out and putting in another and to perform this a screw
Pinion is also fixed and Connected as represented at V. Vat end or Projec-
tion in the Cylindrical Lever by thro' which the Spindle passes up into
the Lever about Two Inches and serves to keep the Spindle true with the Lever
at a Centre as the upper bearing upon which it runs as well as that at the
top and down during the operation of the Machine. W. an iron Casting through
which the Spindle passes, it has a bearing or Step at the bottom by which
the Spindle receives its vertical Direction, which Casting is also connected
to the Lever, whose handle is represented at X. W. Collar fastened on the
Spindle to keep it from lifting and gives Step at the bottom. DC. Screws by which
the Spindles are driven at the rate of about Two revolutions per Minute for
Common Screws. Y. Beam to which is attached five Screws for holding the
Screw during the operation of Cutting; which Screws are Common Screw
Screws with a cross head and held perpendicular by a Screw on the top. Z.
Iron part of the frame which supports the Lever before described & the Stock
with a hole in one end and fastened by means of a Set Screw to the Centre rod keep-
ing the Spindle to keep it from turning; the other end of which Stock
turns in a perpendicular Slide and also prevents the Centre rod from
rising further than is necessary by Coming against the bottom of the
Spindle Step C. is a View of the two Cogs in their Places on the Circular iron
Plate which is let into the Cylindrical wooden Lever for changing down to adapt
it to the two Screws as before mentioned. When both Cogs are of the same
diameter having the same number of Threads in each Screw geared

Screws together by Cap. Screws fixed on the ends of the shafts of the dies to connect & keep the threads in the dies from passing each other but at proper times. The dies screw which answers a very good purpose.....

Operation. The piece of iron to be formed into a screw being first secured in the top of the slide guide screw N. by the iron clasping against the bottom of the ring from the action of the weight R. & screw P. and by the screw device at the top of the machine, the machine turn X is put in motion by steam, water or other power. His drives the small pinion S. on the spindle R. those two pinions with their teeth C. and die B. horizontally the dies at the same time having a vertical movement in the slide guide screw N. the dies pass from this to the piece of iron to be made into a screw thus continuing the operation till the thread is entirely cut. The spindle and dies are then depressed by moving forward the lever R. the cut screw is taken out another piece of iron put in and the before described operation repeated.

What I claim as my invention and not previously known and which I desire to secure by Letters Patent consists in the combination and arrangement of the several parts of the machine as before described for making screws, particularly the mode of giving the dies a simultaneous horizontal & vertical movement in die and also which I claim giving the screw by which the screw is cut circularly at the same time that the dies are closed.

William Keane

Witness
Wm. P. Elliot
Thos. Cowen

1245 words

Examined M.G.

(Enrolled February 13. 1836)