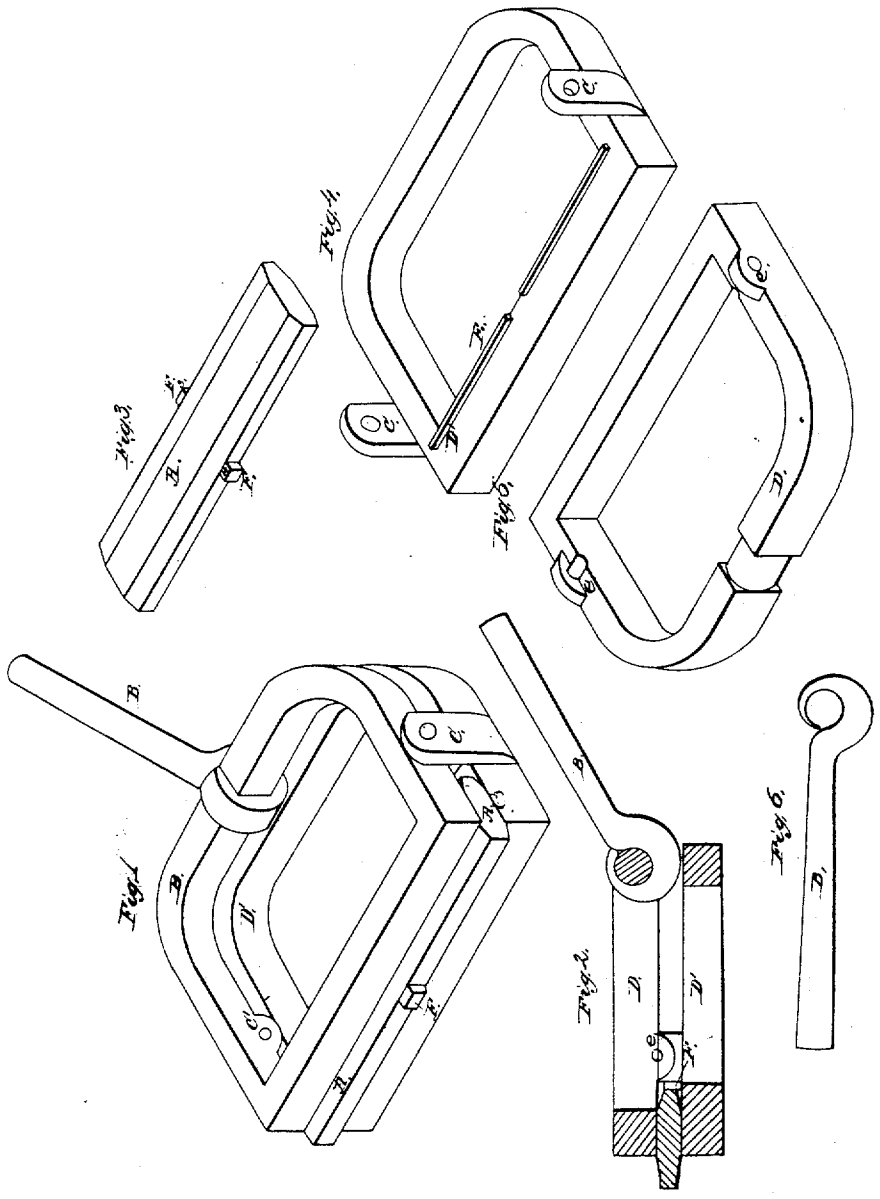
...g, Setting.
...ed set, Lever operated.

EXAMINER'S ROOM

W. Hinds,

Saw-Set,

7,708 × Patented Aug. 12, 1833.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

Aug 12, 1893

7708x William Hinds Otego N. Y.

Letters Patent

The schedule referred to in these Letters Patent and making part of the same containing description in the words of the said William Hinds himself of his improvement in the Saw-set -

To all to whom these presents shall come Be it known that I William Hinds of Otego in the County of Otsego and State of New York have invented a new and useful Improvement in a Machine or Setting Saws and that the following is a full and exact description of the construction and operation of said Machine as invented or improved by me, the principle character or part of the machine is made of cast iron 5 inches long 1 inch wide and 1/8 of an inch thick and is called the former for the purpose of distinction the 4 edges or side corners of the former 1/8 of an inch in width from the corners back towards the center are beveled or taken off to make room for the kind of set of the saw teeth, on one edge or side of the former the quantity beveled or taken off is just sufficient to set saws on the narrowest width or that necessary for the opposite second edge or side the quantity beveled or taken off is little more than on the first edge or side and on the third edge or side the quantity beveled or taken off is still more than it is on the second edge or side in so making four gradually different inclinations or inclined planes on the edge or side corners of the former. On each of the two opposite edges of the former midway from the ends is a slot or projecting piece of saw wire on which are numbers that represent the different inclinations on the edge or side corners. Four kinds or sizes of saws are set to keep the former in its place in a kind of vise into which it is put. The saws above alluded to as former of the parts or pieces of cast iron each part or piece is in shape of the Capital letter D and are each 5 inches long on the straight part to about 4 inches in diameter round, In the description of the use of the two parts in shape of the letter D above mentioned such is called the upper and the under D. The saw and former may also be made of straight iron

M7087

...Iron. Metal...ist of Metals of Cast Iron will be equally as good and much cheaper. The Formula should be cast of Iron and not made of Steel and hardened. The Iron from other Metal that forms the D.g Should not be more than 1/2 inch wide by 3/4 of an inch deep, except the straight part of the under D) which Should be but half an inch deep to the bottom which is for the reception of the Formula which is held in its place by a pin or projection running 1/8 of an inch high in the back or Side of the Straight part of the under D The Straight part of the upper D.s have an inch Square and may be called the guide or the inner edge of the Circle on the line, or the Formula from which the Inclinations are made around the Middle of the Straight part of the upper D. is a kind of Iron about 1/4 inches long made of a rod of Iron of an inch square by Hammering or forging from the Iron to the thickness of an inch at the end Nut a hole Either and long enough to encompass the D which is made round for that purpose the Iron Round the D. the two parts or Ds are connected together about one inch from the inner edge of the Formula in the Circular part by a Brige at each end and one or two Brige in a Blacksmiths bill The Machine Will set Most all kinds of Straight Saws in 4 different Scales or Setts by Shifting the former in the Slit or that Saws may be set in either edge or side thereof The Method of setting is to place the Saw in the Machine with the Gate Screw Screwing it out no more than the length of the teeth extend Middle of the Inner edge of the guide. Then fasten the Saw by turning the Screw by which a Stiker part of the Screw or loop to the Screw is carried in between the parts of the Iron thereby Straining the Iron apart at the Iron and Compressing it at the Straight part. The Saw is set by placing a punch squarely on the teeth and striking it sufficiently with a Hammer - The operator sets four inches in length on the Saw then it is to be removed so much in the Iron, and set as before and so on For Setting Crose Saws Such as mill - Cross cut - Turn - Whip & Circle Saws the Machine is made of Cast Iron, Iron or Wrought Iron about 5 inches long and from 3/4 of an inch to 1 1/2 inch Square with five inclinations at the end five inclinations at each and on opposite sides of said Iron the Inclinations are made from 1/4 to 1/2 an inch in length. These four inclinations

are made with gradual difference to set saws on four different scales or [illegible] from the narrowest to the widest width necessary. The process of using the last described machine is to place it on a bench and place the saw-teeth severally on the inclined bed and strike them with a hammer. Or if the saw is fast in any machine or vice the machine for setting can be held firmly against the saw-teeth and set as before &c. The invention or discovery of every part of the machine above specified and described (except the punch to be used in the same) has been made by me the said William Hinds without the knowledge of any machine being in use or patented having any similarity to it, but from information since received it appears probable that a machine similar to this in some parts especially the part called the formula was patented to John Simmons of Pennsylvania in 1812 in case of which the invention of the said machine as above specified and described is claimed as an improvement. The invention or discovery of the improvement in the different forms or constructions hereinafter described in which said machine may be made is also claimed. First a different lever may be made to turn on a pivot in one part of the vice that by turning will wedge in between the parts of the vice and strain them apart the same as the other lever — the parts of the vice and strain them apart the same as the other lever or the parts of the vice may be strained apart by a screw that will turn through one part of the vice and against the other part.

Second the vice may be made in a different form without hinges of cast or wrought iron and fastened or drawn together by a screw or lever in the centre near the formula

Witnesses
John [illegible]
George Delong

William Hinds

Ent'd
Exd

(Old Drawing)

(Patented August 12, 1833)