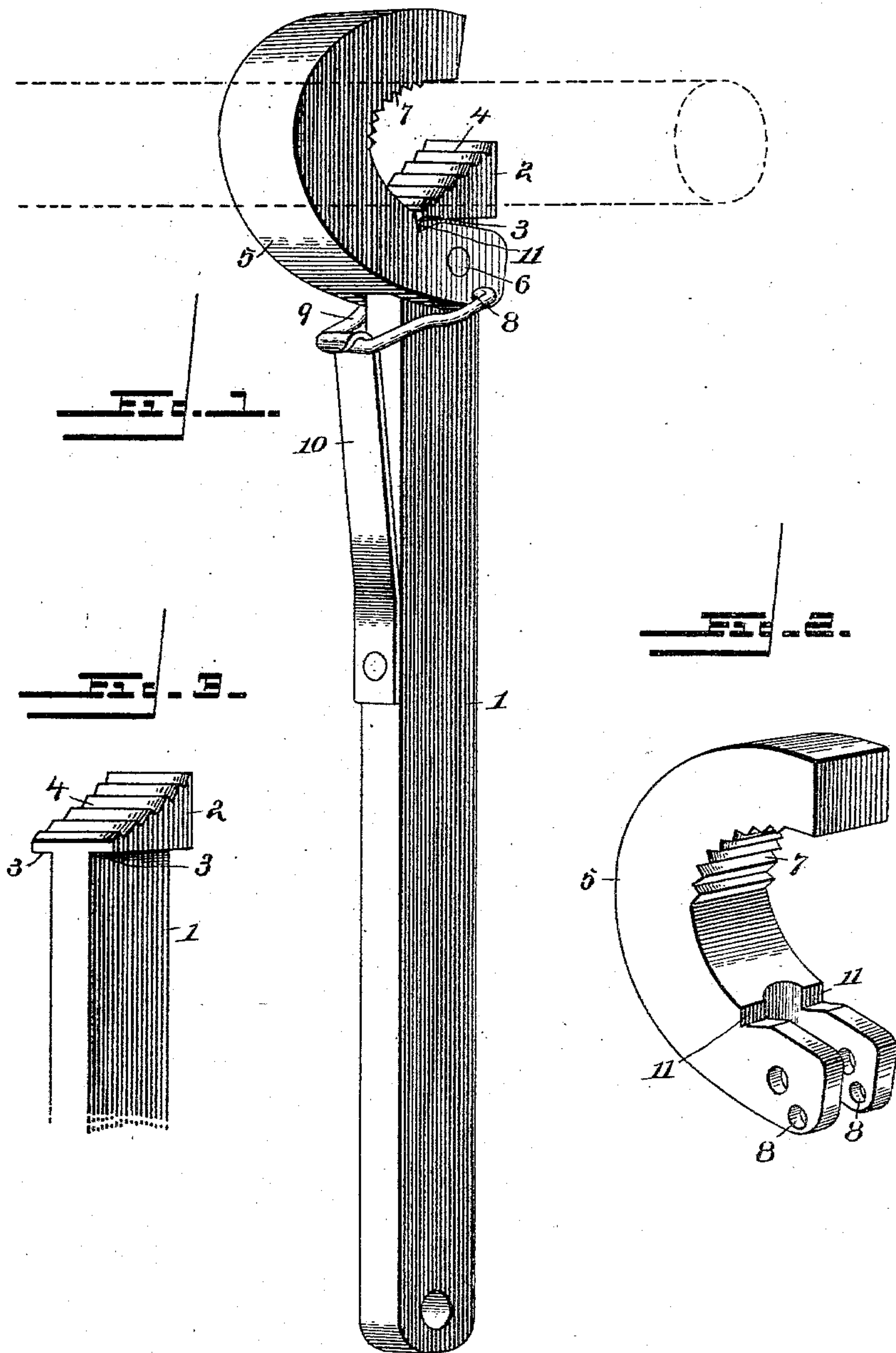


(No Model.)

E. PEMBER.
PIPE WRENCH.

No. 553,015.

Patented Jan. 14, 1896.



Inventor

Elba Pember

Witnesses

Thos. W. Riley
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UNITED STATES PATENT OFFICE.

ELBA PEMBER, OF PEMBERVILLE, OHIO, ASSIGNOR OF ONE-HALF TO C. O. POTTER, OF SAME PLACE.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 553,015, dated January 14, 1896.

Application filed September 20, 1895. Serial No. 563,108. (No model.)

To all whom it may concern:

Be it known that I, ELBA PEMBER, a citizen of the United States, residing at Pemberville, in the county of Wood and State of Ohio, have invented a new and useful Pipe-Wrench, of which the following is a specification.

This invention relates to an improvement in pipe-wrenches, and has for its object to simplify and improve the construction of devices of the character referred to with a view to producing one which may be conveniently applied to and removed from a section of pipe without the necessity of employing both hands.

A further object of the invention is to construct a pipe-wrench in such manner that it will combine simplicity with strength and durability, and which may be manipulated freely and rapidly without liability of denting or splitting or otherwise injuring the pipe to which it is applied.

The invention consists in an improved pipe-wrench embodying certain novel features and details of construction, as hereinafter fully described, illustrated in the drawings, and finally pointed out in the claim.

In the accompanying drawings, Figure 1 is a perspective view of an improved pipe-wrench constructed in accordance with this invention. Fig. 2 is a similar view of the pivoted hook or jaw. Fig. 3 is a detail view of the outer end of the stock or handle, showing the form of the fixed jaw.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

Referring to the accompanying drawings, 1 designates the stock or handle of the wrench, which is expanded or formed with a triangular enlargement 2 at its outer end, as shown. This expanded or enlarged end is made to project laterally upon opposite sides of the stock or handle 1 in such manner as to form shoulders 3, and the outer inclined face of such expanded end is provided with a series of teeth or serrations 4, thus constituting the fixed or stationary jaw of the device.

5 designates the pivoted or movable jaw of the wrench. This jaw is in the form of a hook or is substantially semicircular, one

end thereof being bifurcated to embrace the stock or handle 1 and being pivotally secured to the latter by means of a pin or screw 6, passing through transversely-aligning perforations in the pivoted jaw and stock in the manner indicated in the drawings. This curved or semicircular jaw is formed in the arc of a circle slightly less than the diameter of the pipe to be operated upon, and is formed in its inner face with a series of teeth or serrations 7, which are adapted to grip the pipe and rotate the same upon the vibration of the stock or handle, in a manner well understood in the art. The pivoted jaw 5 is further provided adjacent to its pivotal connection with the stock or handle with perforations 8, which extend through the bifurcated portions of said jaw and receive the intumed extremities of an open link 9, which embraces the stock and extends slightly to the rear thereof, where it is engaged by the hooked end of a flat spring 10, secured to the rear edge of the stock 1, as shown. In this manner the pivoted jaw is held normally closed and in engagement with the section of pipe to be operated upon. The pivoted jaw is also provided with oppositely-disposed notches 11 within the inner edges of its bifurcated end portions, as shown, which engage the shoulders 3 of the expanded end or stationary jaw above described for the purpose of limiting the closing of the pivoted jaw and holding the flat or blunt nose thereof at a considerable distance from the point of the stationary jaw.

By means of the construction above described the wrench may, with the aid of one hand only, be placed over and engaged with a section of pipe and manipulated with great rapidity without danger of denting or splitting such pipe. The wrench is caused to embrace the pipe by simply bringing the wrench into such relation to the pipe that the latter will rest within the mouth of the wrench or in the space between the fixed and pivoted jaws, when by pressing upon the handle the pivoted jaw will spring over the pipe and be forced into frictional engagement therewith by means of the spring 10. The wrench may also be removed single-handed by drawing upon the stock or handle and rocking or vibrating the latter in a manner that will be

readily understood. By pressing with the thumb or finger against the spring 10 the pivoted jaw may be readily disengaged from the work single-handed. Thus a very simple
5 and efficient pipe-wrench is obtained, which may be applied and removed single-handed, and which will retain its engagement with the pipe whether the latter be in horizontal or vertical position. Two of such wrenches may
10 be employed simultaneously to adjacent sections of pipe, one for holding and the other for turning, without the necessity of dropping or releasing one wrench while applying or removing the other, thus greatly increasing
15 the utility of the device and effecting a saving in time over wrenches in which it is necessary to employ both hands in the application, operation and removal of the wrench.

Having thus described the invention, what
20 is claimed as new, and desired to be secured by Letters Patent, is—

In a pipe wrench, the stock or handle thereof formed with an expanded end substantially triangular in shape and constituting the fixed jaw of the device, in combination with a curved or hooked jaw having a pivotal connection with said stock or handle and formed in its inner face with a notch adapted to engage with the expanded end or fixed jaw of the handle, and also having an
30 extension beyond its pivot, an open link pivotally connected to said extension, and a flat spring secured to the handle and having its free end hooked to engage said link, substantially as and for the purpose specified. 35

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ELBA PEMBER.

Witnesses:

O. M. GOSNELL,
JOHN S. HOYMAN.