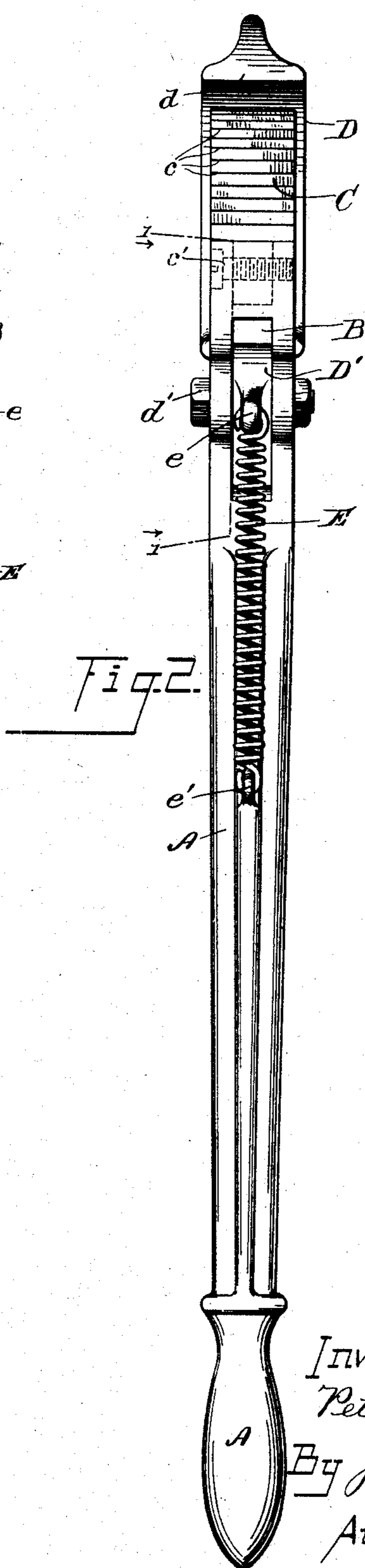
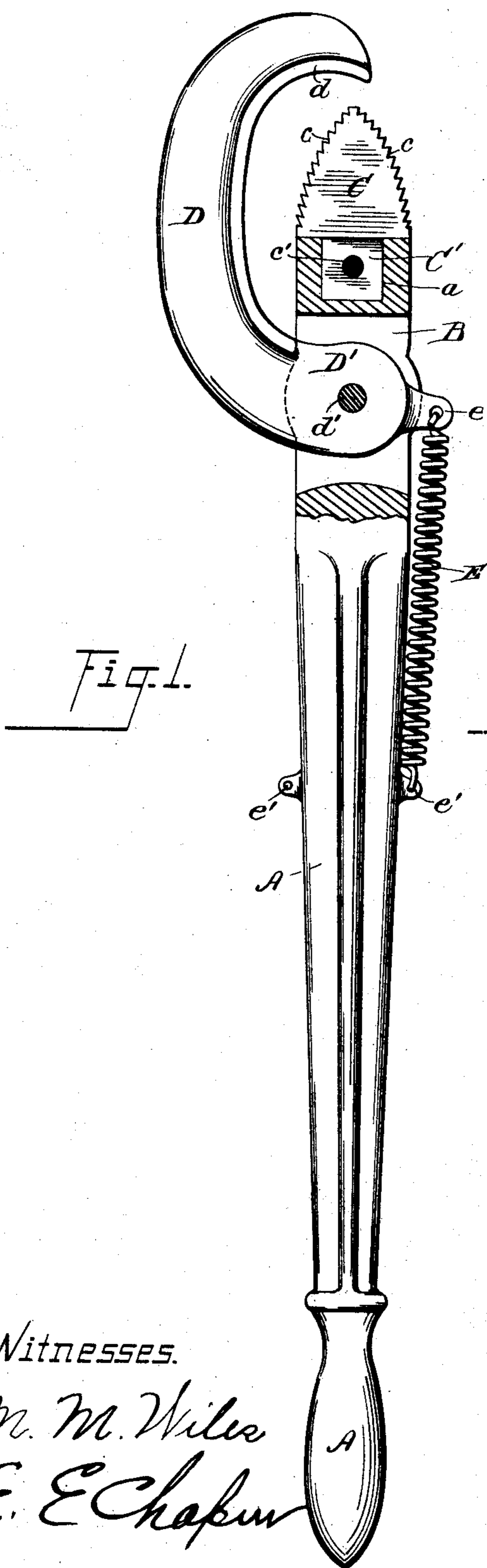


(No Model.)

P. PAULUS.  
PIPE TONGS.

No. 506,372.

Patented Oct. 10, 1893.



Witnesses.  
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E. E. Chapin

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Attorney

# UNITED STATES PATENT OFFICE.

PETER PAULUS, OF MILWAUKEE, WISCONSIN.

## PIPE-TONGS.

SPECIFICATION forming part of Letters Patent No. 506,372, dated October 10, 1893.

Application filed June 19, 1893. Serial No. 478,129. (No model.)

### *To all whom it may concern:*

Be it known that I, PETER PAULUS, a citizen of the United States, residing at Milwaukee, county of Milwaukee, State of Wisconsin, have invented a certain new and useful Improvement in Pipe-Tongs; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to new and useful improvements in the construction of pipe tongs, and consists in the matters hereinafter described and more particularly pointed out in the appended claims.

In the accompanying drawings, illustrating my invention Figure 1 is a view of my improved device partly in side elevation, and partly in section on line 1—1 of Fig. 2. Fig. 2 is a front elevation of the same.

Referring by letter to said drawings A designates the handle of my improved tool, which is provided adjacent to one end with a transverse slot B for the reception of a movable jaw, as will be presently described. In the end of the handle A adjacent to said slot, is provided a suitable socket *a* for the reception of the shank of a toothed jaw C. The toothed jaw C is preferably constructed in the manner shown in the drawings with two curved faces provided with suitable serrations or teeth *c c* and is provided at its base with a shank C' adapted for engagement with the socket *a* in the end of the handle. A suitable transverse bolt or screw *c'* is passed through the end of the handle and the shank of a toothed jaw to secure the latter in place in an obvious manner.

A movable jaw D is provided with a flattened portion D' arranged to pass through the slot B in a manner shown more particularly in Fig. 1 of the drawings, and a suitable bolt or pivot *d'* is passed through the handle A and through the flattened portion of the movable jaw D to pivotally support said jaw in position within the slot. The free end of the jaw D is provided with a forwardly curved portion *d* arranged to come approximately into line with the apex of the fixed jaw when the two jaws are closed together as in Fig. 1.

Upon the pivoted jaw D adjacent to the pivotal connection between it and the handle A, is provided an apertured ear *e* for engagement with one end of a spiral tension spring E the other end of which is arranged to engage with a similar ear *e'* upon one side of the handle A. Two of these ears *e'* are provided as shown in Fig. 1 and located upon opposite sides of the handle.

By the arrangement of the bolt *d'* to secure the movable jaw D in engagement with the handle, said jaw may be readily detached from the handle by the removal of the bolt in an obvious manner. If desired a number of jaws similar to the one shown but of different sizes may be employed in connection with one handle, it being necessary in adapting the tool for use upon pipes of greatly different sizes to simply remove the bolt, disengage the jaw D from the handle and substitute a jaw of the desired size.

By the described construction of the stationary toothed jaw with two serrated or toothed faces, and the handle with the two apertured ears it will be seen that in case of excessive wear upon one face of the stationary jaw, or injury to the teeth of the same, the jaw D may be removed and replaced in engagement with the handle but upon the opposite side thereof. The apertured ear *e* being thus caused to project through the slot B upon the opposite side of the handle from that shown and in this case the spring E will be engaged with the other one of the ears *e'* upon the handle in an obvious manner.

By the arrangement of the spring to normally press the movable jaw toward the stationary toothed jaw, the tool is caused to automatically grasp the pipe or other object upon which it is desired to use it.

By the described construction of the toothed stationary jaw C with the shank C' removably engaged with the socket *a* in the end of the handle, the toothed jaw may be readily disengaged from the handle A and replaced by one of a different shape or size if desired.

In operation the jaw D is first opened to admit a pipe or other object between its curved end *d* and the serrated face of the stationary jaw C when the spring E will cause the jaw D to bear against the surface of the pipe or other object when by pressure upon

the free end of the handle in the proper direction the jaws will be caused to securely grip the pipe in an obvious manner.

In practice I find my improved form of  
5 tongs very efficient and satisfactory, while at  
the same time, the tool is exceedingly strong  
and durable. Furthermore, by the detach-  
able arrangement of the stationary toothed  
jaw and the movable jaw the range of the tool  
10 may be greatly increased by the use of an as-  
sortment of different sized toothed jaws and  
movable jaws, so that the tool may be quickly  
and easily adjusted for use upon pipes of  
greatly different sizes.

15 Having thus described my invention, what  
I claim as new, and desire to secure by Letters  
Patent of the United States, is—

1. A pipe tongs comprising a suitable han-  
dle provided at one end with a stationary  
20 jaw, having serrated or toothed surfaces upon  
opposite sides; a transverse slot extending  
through the handle adjacent to said toothed  
jaw, a movable jaw having a forwardly curved  
free end, and pivotally engaged within said  
25 slot and provided upon its end adjacent to

said pivotal connection with an apertured ex-  
tension, and a spring connection between said  
extension and the handle substantially as de-  
scribed.

2. A pipe tongs comprising a suitable han- 30  
dle provided at one end with a stationary  
jaw having two serrated or toothed faces, and  
detachably engaged with said handle, a slot  
extending transversely through the handle  
adjacent to said toothed jaw, a movable jaw 35  
having a detachable, pivoted engagement  
within said slot, and provided at its free end  
with a forwardly curved face, and adjacent  
to its pivotal connection with an apertured  
extension, and a spring connection between 40  
said apertured extension and a suitable pro-  
jection upon the handle substantially as de-  
scribed.

In testimony whereof I sign this specifica-  
tion in the presence of two witnesses.

PETER PAULUS.

Witnesses:

JOHN E. WILES,  
M. M. WILES.