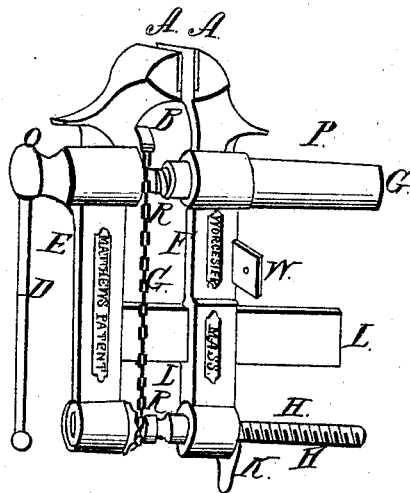


*E. G. Matthews,*

*Vise.*

*No 3,212.*

*Patented Aug. 11, 1843.*



# UNITED STATES PATENT OFFICE.

E. G. MATTHEWS, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO JOHN J. MARKHAM,  
OF WORCESTER, MASSACHUSETTS.

## WISE.

Specification of Letters Patent No. 3,212, dated August 11, 1843.

*To all whom it may concern:*

Be it known that I, ELBRIDGE G. MATTHEWS, of Worcester, in the county of Worcester, State of Massachusetts, have invented a new and Improved Vise, called the "Parallel Vise"; and my said inventions and improvements are more fully and plainly shown in the following specifications and drawings hereto annexed, which are intended to constitute a part of this description, to which reference is made.

A A, represents, the construction of the faces of the jaws. The faces of the jaws are made of cast steel which are dove-tailed into the standards, E, and F, as will appear on the drawings;

B, represents, a cap to cover the cogs, and chain hereafter mentioned. Its use is to cover the chain, screw and cogs, hereafter mentioned, and to prevent the dust or filings from falling from the jaws of the vise on to the cogs, chain, and screws, as will appear on the drawings.

H, H, represents, a second screw at the lower end of the vise, which is moved together with the upper screw G, and by their being turned together, by the lever, D, causes the movable standard and jaw, to be carried toward, and from the other standard, and fixed jaw, in a parallel motion.

R, R, represents a set of cogs on each screw H H and G, as will be seen on the drawings at R R, and an endless chain G, of square links passes around on these cogs, so that by turning the upper screw by the lever D, both screws H H and G, are turned by the means of cogs and chain aforesaid and thereby the standards or sides of the

vise E and F, approach and recede parallel to each other.

M represents, an iron plate or flange cast with the fixed standard or jaw F, and by a bolt passing through this plate or flange the vise is fastened to the side of the bench. K is a plate of iron at the bottom of the standard F, its use is to fasten the bottom of the vise, by a bolt passing through it into a post under the bench.

P P, represents, a cast iron case or sheath in which the screw G turns, its use is to protect the screw G, and is made larger than the screw so that the screw can move in the case or sheath P, P.

L L, represents, a cast iron slide, made fast in standard E, and passes through the fixed standard F closely filling the openings so that the slide moves with the movable standard E and slides in the fixed standard F. Its object and use is to strengthen the vise and prevent the spring of the screws, H H and G, by hard blows on the jaws or face of the vise at A.

I claim as my invention the following improvement in the vise:

Moving the jaw by the combination of an upper and lower screw connected and worked together by a link chain and cog wheels as herein described, and in combination therewith, I claim the slide L, L for guiding and keeping steady the movable jaws as described.

ELBRIDGE G. MATTHEWS.

In presence of—

ARTS. A. WARD,  
WM. GREENLEAF.