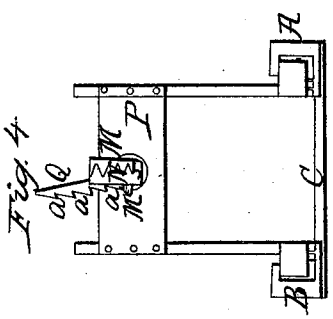
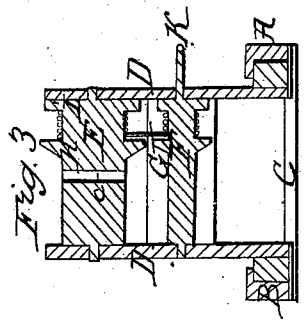
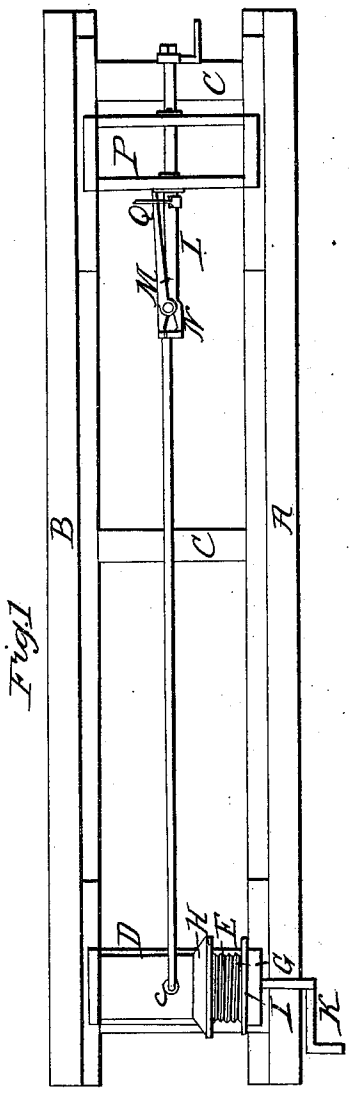
J. Smith,

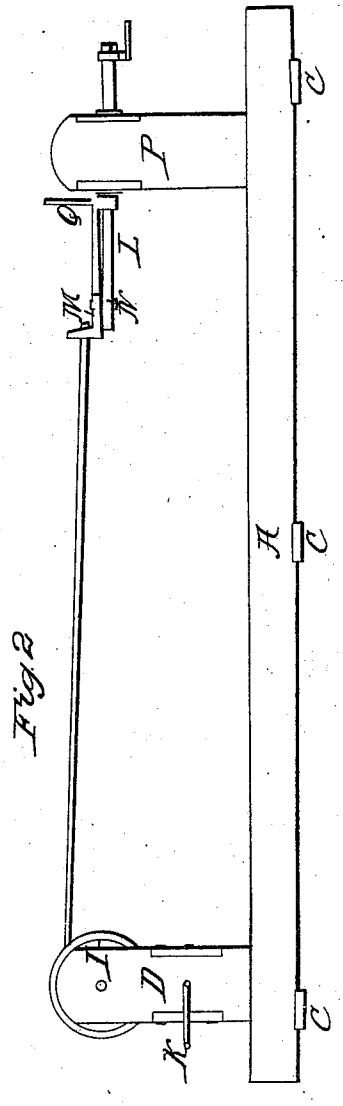
Twisting Withes,

No. 5,217, Patented Aug. 7, 1847.









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UNITED STATES PATENT OFFICE.

JONATHAN SMITH, OF FRANKFORT, MAINE.

MACHINERY FOR TWISTING WITHES.

Specification of Letters Patent No. 5,217, dated August 7, 1847.

To all whom it may concern:

Be it known that I, JONATHAN SMITH, of Frankfort, in the county of Waldo and State of Maine, have invented a new and useful machine for making or twisting withes for the manufacture of crates for earthenware or for the bundling of hay or other matters; and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of said drawings Figure 1 denotes a top view of my machine. Fig. 2 is a side elevation of it. Fig. 3 is a vertical and transverse section taken through the windlass or winding up barrel. Fig. 4 is an end view of the rotating pincer shaft, and its notched bar, by which the jaws of the pincers are made to retain their hold on the withe.

A, B, in said drawings denote two longitudinal and parallel rails, held together by any suitable number of cross timbers C C extending from one to the other of them, the whole constituting a frame for the twisting shaft frame to rest and move on. At one end of the said frame of rails A, B, is a fixed or stationary frame D which is raised vertically on the ways A, B, and bolted firmly to them. The said frame D carries a windlass barrel E and also a smaller barrel F, placed directly under the barrel E and parallel to it. A rope G after being attached at one end to the upper barrel is wound around it between flanges H, I, and has its other end attached to the surface of the lower barrel, which is turned by a crank K.

L is a horizontal mandrel or shaft, having pincers or jaws M, N, applied to one end, as seen in the drawings. The said shaft is sustained by and revolves within a frame or puppet head P, which rests and slides freely, on the rails A, B, toward and away from the windlass barrel E. Q is a notched bar or plate of metal applied to the shaft L so as to revolve freely upon it, and having its notches *a*, *a*, &c., arranged in such manner as to enable a person to hook any one of them, over the leg or lever *b*, of the pincer jaw M. A hole *c*, is made downward in the windlass barrel E large enough in diameter, to admit the end of a pole or piece of wood to be converted into a withe.

The above constitutes my machine. The manner of using it is as follows: A long and slender pole of birch or other material to be converted into a withe, has its smallest end inserted in the hole *c* of the windlass barrel, and confined there by a wedge. The other end or largest end is placed between the jaws of the shaft L, and said jaws are closed firmly upon it. The shaft L is next put in revolution by a person applying his hand to the crank thereof, and turning the same. This twists the pole at that end which is attached to the windlass barrel. As the twisting operation progresses, the said windlass barrel is to be put in revolution (by a person acting on the crank of the barrel E) in such manner as to wind the twisted part thereon. This will gradually draw the puppet head P toward the windlass barrel, until the whole pole is twisted and wound upon it, which being accomplished the frame P may be afterward forced or slid back, so as to unwind the withe or pole from the barrel.

The twisting, and making withes have heretofore been effected by the hands of the workmen, without the aid of mechanism such as the above, and it has generally been found to be a very slow, fatiguing and laborious process, in comparison to what it is when my machine is used. The windlass barrel of my machine may be rotated by any proper machinery, as a substitute for the barrerl F and its cord G.

What I claim as my invention is—

The rotating pincer or twisting shaft or mandrel L, (having pincers, jaws, or other appliances, for holding one end of the pole to be converted into a withe) in combination with the rotating windlass barrel E, for winding up the pole, or straining its fibers in such manner as to secure the twist put in by the shaft L the whole being constructed, and made to operate together substantially in manner, and for the purpose of making withes as above specified.

In testimony whereof I have hereto set my signature this tenth day of March A. D. 1847.

JONA. SMITH.

Witnesses:

N. H. HUBBARD,

HENRY G. MORGAN.