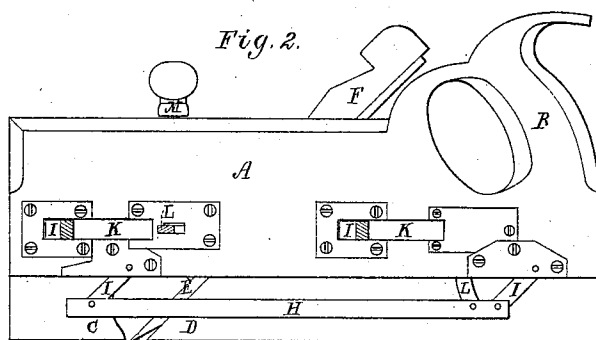
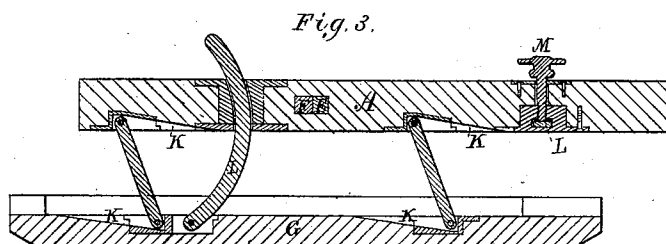
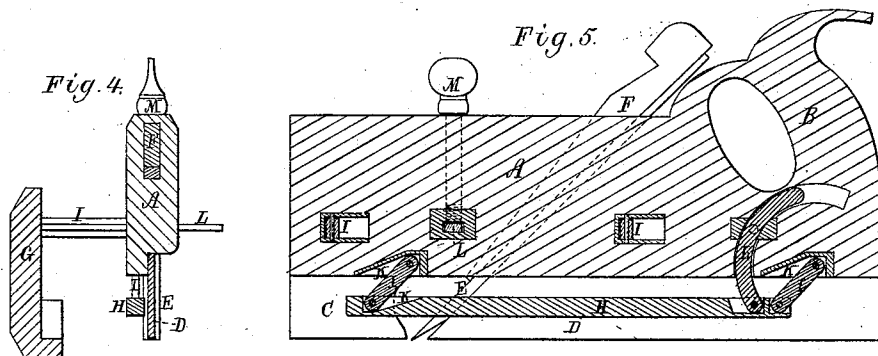
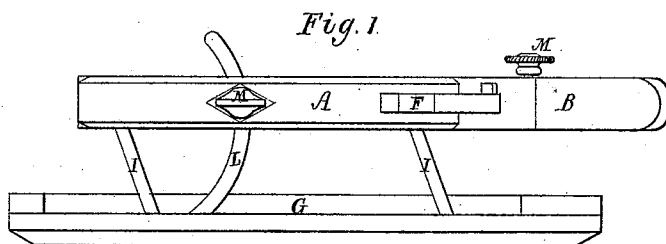


(No Model.)

S. A. PIPER.
Bench Plane.

No. 243,398.

Patented June 28, 1881.



Witnesses:

S. A. Piper
R. H. Eddy

Inventor.

Samuel A. Piper.
by R. H. Eddy atty.

UNITED STATES PATENT OFFICE.

SAMUEL A. PIPER, OF NEWTON, MASSACHUSETTS.

BENCH-PLANE.

SPECIFICATION forming part of Letters Patent No. 243,398, dated June 28, 1881.

Application filed May 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. PIPER, of Newton, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Plow or Grooving Planes; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

10 Figure 1 is a top view, Fig. 2 a longitudinal section, Fig. 3 a horizontal section, and Fig. 4 a transverse section, of the plane as open. Fig. 5 is a vertical section taken through its depth or lower gage.

15 The nature of my invention is defined by the claims hereinafter presented.

The grooving-plane, as described, has either or each of its gages connected with the stock by means of parallel links jointed to both, and 20 such stock and gage are recessed to receive, when closed together, the links, and are provided with a clamping arc and screw, the whole enabling the gage to be readily adapted in parallelism with and to different distances from 25 the stock and its cutter or plane iron, as occasion may require. The invention admits of the plane being materially reduced in width by closing the width-gage upon the stock, in which case their connections will not project beyond 30 that side of the stock which is opposite to the one against which the gage may rest.

In the drawings, A denotes the stock; B, its handle; C D, its throat-plates; E, its chisel

or cutter, and F the holding-wedge of the latter.

G is the width-gage, and H the depth-gage. 35 Each of the said gages is connected with the stock by two parallel links, I I, pivoted or hinged at their ends to the gage and stock, there being within the said gage and stock recesses K, as shown, to receive the links when 40 the gage is closed against the stock. There is also pivoted or hinged to the gage a circular curved arc or bar, L, which goes or slides freely into or through the stock, which is provided 45 with a clamp-screw, M, to act against and clamp the arc in position.

I claim—

1. In a plow or grooving plane, either or each of its gages connected with the stock by 50 parallel links pivoted to such stock and gage, in combination with such stock and gage, recessed to receive, when they are closed together, the said links, and provided with a clamping arc and screw for holding the gage 55 in position, all being substantially as set forth.

2. In a plow or grooving plane, either or each of the gages connected with the stock by parallel links pivoted to such stock and gage, in combination with a clamping arc and screw 60 adapted to the gage and stock and to each other, substantially as set forth.

S. A. PIPER.

Witnesses:

CHARLES ELLIS,
ADELA M. ELLIS.