

forcing the follower up, the chain, *e*, is attached to the farther end (not shown) of the timber or iron bar, *B*, which passes through the frame beneath the follower, and being brought over two pulleys on the ends of the timber, *C*, is secured to the shaft, *D*. A similar chain passes directly from the near end of the timber, *B*, to the opposite side of the same shaft, so that when the shaft is turned the two chains will be wound around it in opposite directions, and the follower raised. The shaft, *D*, has a gear wheel upon it which meshes into the worm, *E*, upon the shaft, *F*, so that by turning the crank, *G*, the shaft, *D*, is rotated slowly, but with multiplied power. The usual grooves, *c c c c*, are made in the ends for the passage of the bands by which the bale is secured after it is pressed.

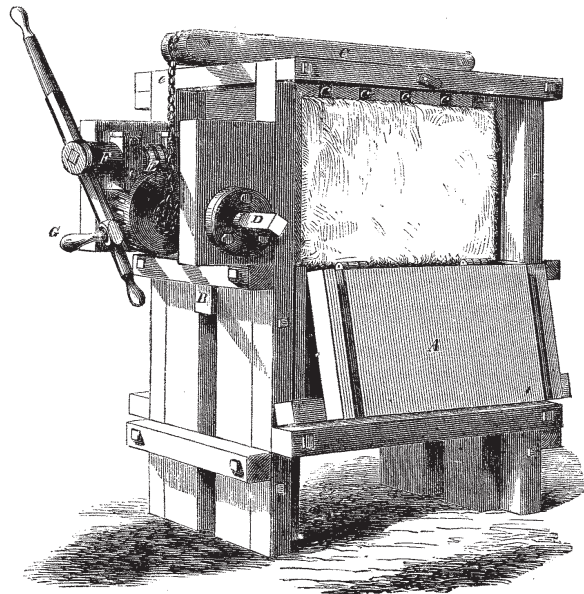
For pressing hops, a bag is laid in the box, and the hinged and sliding movable doors are dispensed with.

The patent for this cheap and compact press was granted (through the Scientific American Patent Agency), on March 20, 1860; and further information in relation to this valuable improvement may be obtained by addressing the inventor,

David L. Miller, at Madison, N. J.

#### IMPROVED HAY, HOP AND COTTON PRESS.

The invention which we here illustrate is worthy the attention of all who desire a cheap, compact, portable



#### MILLER'S HAY, HOP AND COTTON PRESS.

press, which requires no bracing from without, but is complete in itself, and may be worked by hand-power.

A smooth box bound together with stiff timbers and iron rods, in the usual manner, is constructed with the upper head or end stationary, and the lower one movable as a follower. The lower portion of the box is made stationary, while the upper portion is closed by hinged doors, *A*, on two sides, and by sliding doors on the other two sides. The lower end-piece being let down to the bottom of the box, the hay or other produce is thrown in till the box is full, when the upper doors are closed, and the follower is drawn upward, compressing the hay. For