

Science and Art.

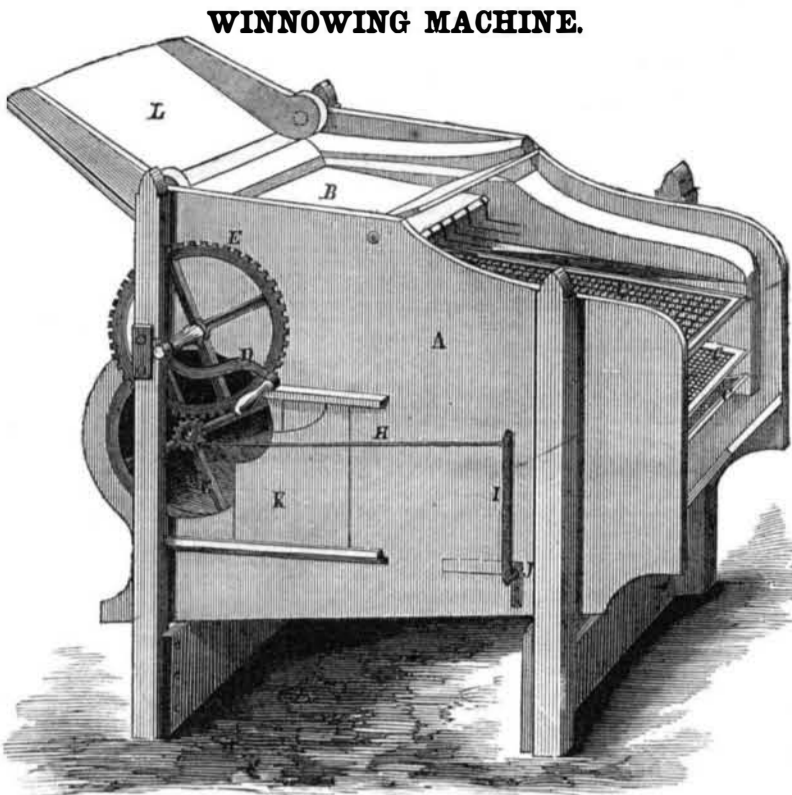
The Woodworth Planing Machine.

We are in pursuit of information concerning a new game, which, we learn, is attempting to be practiced by some of the Woodworth assignees. If the rumor is substantiated by evidence, we shall have another chapter to write, in a week or two, on the planing machine monopoly.

Sheple's Winnowing Machine.

The ancient process of pouring out grain under the influence of wind to separate the heavy grain from the chaff has long been abandoned for a simple machine which allows the grain to fall more evenly and slowly, and subjects it to a more powerful blast artificially generated by a fan. The improvements in the machine are necessarily confined to modifications of the detail so as to ensure greater simplicity and durability, and more rapid or more easy action.

The engraving here presented is a perspective view of a machine on which an application has been made for a patent. A is the frame, B the hopper platform, and C C the sieves. D is the crank by which the machine is operated. E is a large gear wheel on the crank shaft. F is the quick shaft, on which the fan G is mounted. The sieves, C, are connected to a light rock-shaft, J, on which is fixed the shaking lever, I, outside



the frame. H is a rod connecting I with a crank on the fan shaft, as represented. K is a door which may be opened and closed to any desired extent to regulate the supply of air to the fan, and consequently to increase or diminish the blast through between the

sieves. L is a hinged feed apron, a very convenient attachment which may be extended when required for use, and folded up when the machine is to be stowed away or transported.

For further information, address the inventor, C. C. Sheple, Waterbury, Vt., who has applied for Letters Patent.

Sugar Maples.

The New York Tribune has published several articles setting forth the importance of the soft maple as an ornamental and valuable tree in other respects, and also as a sugar-producing tree. In a late issue it presents the following, from an experienced sugar maker in Vermont:—

"The flow of sap from this variety of the maple is considerably larger than the variety known as sugar or rock maple—probably double in quantity. But it does not contain more than half the saccharine quantity per gallon contained by the sap of the other variety. Sugar can be made from the soft maple sap, and also from the sap of the yellow birch (which flows in still more plentiful amount); but the difficulty is that so much more fuel is required to reduce the sap to sugar than is required with that syrup derived from the sugar maple, that it will not pay the cost."

In addition to this difficulty, it is understood that soft maple and birch sap will not granulate into sugar, but will, like the juice of the Sorgho Sucre, remain a simple cheap syrup or molasses.

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