

WISE'S ICE CREAM BEATER.

We illustrate herewith a new machine for beating ice cream during the freezing process. The advantages claimed are noted below. The mechanical construction is as follows: The cream can, A, is placed in a suitable ice tub, and upon its upper edge is placed the top, B, which extends over the rim inside the ratchet teeth, C, and also partially covers the top of said can. A central opening above, which is a hopper-shaped chute, is provided. The cover thus constructed prevents the cream from splashing out while the beaters are in motion, and it is secured by braces connecting with the frame. One of these braces serves as an axis on which an arm, carrying a hinged pawl, may be worked by means of a pitman, D, and eccentric operated by the crank handle shown. On the shaft are two cranks, and on the latter are sleeves in which the beaters, E, are secured. The revolutions of the crank arms cause the beaters to pass alternately back and forth in and through the cream can and its contents, rising as they end and descending as they begin the stroke. The paddles are constructed as shown, and the ratchet teeth on the upper edge of the can are engaged by the pawl, which thus causes the can to revolve on its vertical axis.

The following advantages are claimed: The cream is beaten in the same manner as by hand, and two thirds of the manual labor is saved. The machine being run regularly, the can, turning one half inch to stroke of the beaters, makes cream as fine and more evenly than can be made by hand. The cream being frozen two thirds stiff by the freezing apparatus before using this machine, there is no danger of beating the richness of the cream into butter before the freezing takes place. The top of the can and ratchet rim are so constructed that they can be placed over any can of one size, thereby doing away with the necessity of having a certain tub and can for each machine, and so saving the labor of changing and packing the cream for every additional freezing. The beaters having a peculiar shaped tip bent in such a manner as to give greater dash to the cream, greatly facilitate the operation; and lastly, the machine is simple in construction, strongly built, not easily put out of order, and easily duplicated in all its parts. For further particulars as to State rights for sale outside of Pennsylvania and proposals for building the machine, address the inventor and patentee, Mr. Wm. E. Wise, Williamsport, Pa.

AN IMPROVED HOISTING MACHINE.

We illustrate herewith an improved hoisting machine especially suited for mining use, which embodies a new arrangement of wedges and levers for shifting the winding drum into and out of gear, and also into and out of contact with the brake shoes. The driving shaft carries two grooved friction wheels, A, which gear with the larger wheels, B, on the winding drum. The wheels, B, are of wood, the grain of which extends in a radial direction, and beside each is a friction disk, C, which rotates in close proximity to the copper-faced brake, D, which is attached to the frame. In Fig. 2 is shown the box wherein the shaft of the winding drum has its bearing contains two blocks, E, concave on the sides nearest the shaft and convex at their outer sides. From the center of the cap projects a forked standard in which is fulcrumed the T-lever, F, to opposite arms of which are pivoted the wedges, G, which enter the box and come in contact with the convex ends of the blocks, E, as shown. These wedges are backed by a filling of Babbitt metal in the casing which holds them against the block ends. The upper arm of the T-lever is connected with an arm on the rock shaft, H, to which last is attached a lever, I. At the opposite end of the winding shaft similar arrangements are provided, so that both ends of the winding shaft are moved simultaneously when the rock shaft is turned.

By moving the lever, I, toward the hoisting drum, the forward edges are forced into the boxes and act upon the blocks so as to move the winding shaft and its wheels away from the small gear wheels, A. The drum being thus released is free to rotate unless the movement of the lever, I, is continued until the friction disks, C, are thrown

into contact with the brake shoes, when the motion may be controlled at pleasure. By reversing the movement of the lever, I, the drum is carried forward so as to release the friction wheels from the brake shoes and to bring the large gears into contact with the driving wheels. The lever, I, is suitably connected with the hand lever, J, with which may be combined mechanism so arranged that when the gearing is thrown out of contact the engine valve is regulated in accordance. Patented January 8, 1878. For further particulars ad-

for want of proper means of conveyance. It is a hard, fine-grained wood, and exhibits numerous open cells. The principal uses made of dogwood are for fellies for wheels and for ship timber. From its toughness and other properties, it is better adapted to the former purpose than any other of the Bahamian woods. The tree does not attain any considerable size, and is generally crooked; a rather soft, open-grained, but very tough wood.

Stopperwood is principally used for piles and for wheel spokes. It is a very strong and durable wood, and grows from 12 to 16 feet long, and from six inches to eight inches in diameter. It is found on all the Bahamian islands, and is an exceedingly hard, fine, close-grained, and very heavy wood.

Lignumvitæ grows on several of the Bahama islands, and is generally exported to Europe and America. The principal use made of it in the Bahamas is for hinges and fastenings for houses situated by the sea shore or in the vicinity of salt ponds on the islands, where, from the quick corrosion of iron hinges, etc., metal is seldom used.

Bahama satinwood, so well known in the London market, and also called yellow wood, grows abundantly on Andros Island and others of the Bahamian group, and to a large size. It is a fine, hard, close-grained wood, showing on its polished surface a beautifully rippled pattern.

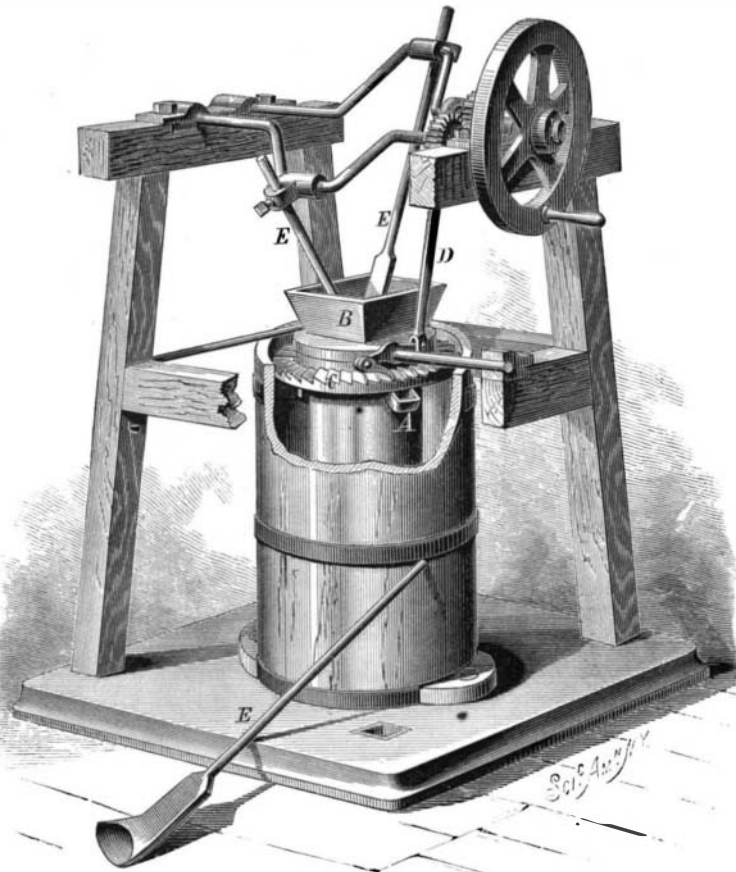
Bahama mahogany grows abundantly on Andros Island and others of the Bahama group. It is not exceeded in durability by any of the Bahama woods. It grows to a large size, but is generally cut of small dimensions, owing to the want of proper roads and other means of conveyance. It is principally used for bedsteads, etc., and the crooked trees and branches for ship-timber. It is a fine, hard, close-grained, moderately heavy wood, of a fine, rich color, equal to that of Spanish mahogany, although probably too hard to be well adapted for the purposes to which the latter is usually applied.

Crabwood is mostly used for picture frames and small ornamented cabinet work, etc. It seldom grows larger than from three to four inches in diameter, and is a rather hard, fine, cross-grained, moderately heavy wood. The heartwood is of a beautifully veined Vandyke brown,

its external edge bright black, and the alburnum of a pure white. In Trinidad the balata is a timber extensively used for general purposes, and much esteemed. Its diameter is from two to six feet. The mastic is also held in high estimation, and varies from two to four feet in diameter. The gru-gru, which is a palm, yields beautiful veneer, as also does the gri-gri. For some of these trees it will be observed that we have no vernacular name, consequently the choice lies between the native and the botanical name. The heartwood of the butterwood only is used. The beauty of the wood is well known, but it never attains a large size. Its recent layers are of a uniform yellowish white color. The carapa bears a considerable resemblance to cedar, and is extensively used and much esteemed. It is from two to three feet in

diameter. The West Indian cedar of Trinidad is a most useful timber, and is well deserving the attention of consumers, as is also the copai, a beautiful and durable wood. The sepe is a light wood, resembling English elm, impregnated with a bitter principle, which preserves it from the attacks of insects. It is tough, strong, and is used for general purposes. In diameter it ranges from one to two feet. L'Angelme is a strong, hardy wood, exclusively used for the naves of wheels, etc. Courbaril is a valuable and abundant timber of from two to six feet in diameter, and may be otherwise described under the name of West India locust. Yorke saran is a very hard and useful wood, and also pearl heart, which has the advantage of being very abundant, and runs from two to four feet in diameter. Aquatapana is a very durable and curious wood, susceptible of high polish, and from 18 to 36 inches in diameter.

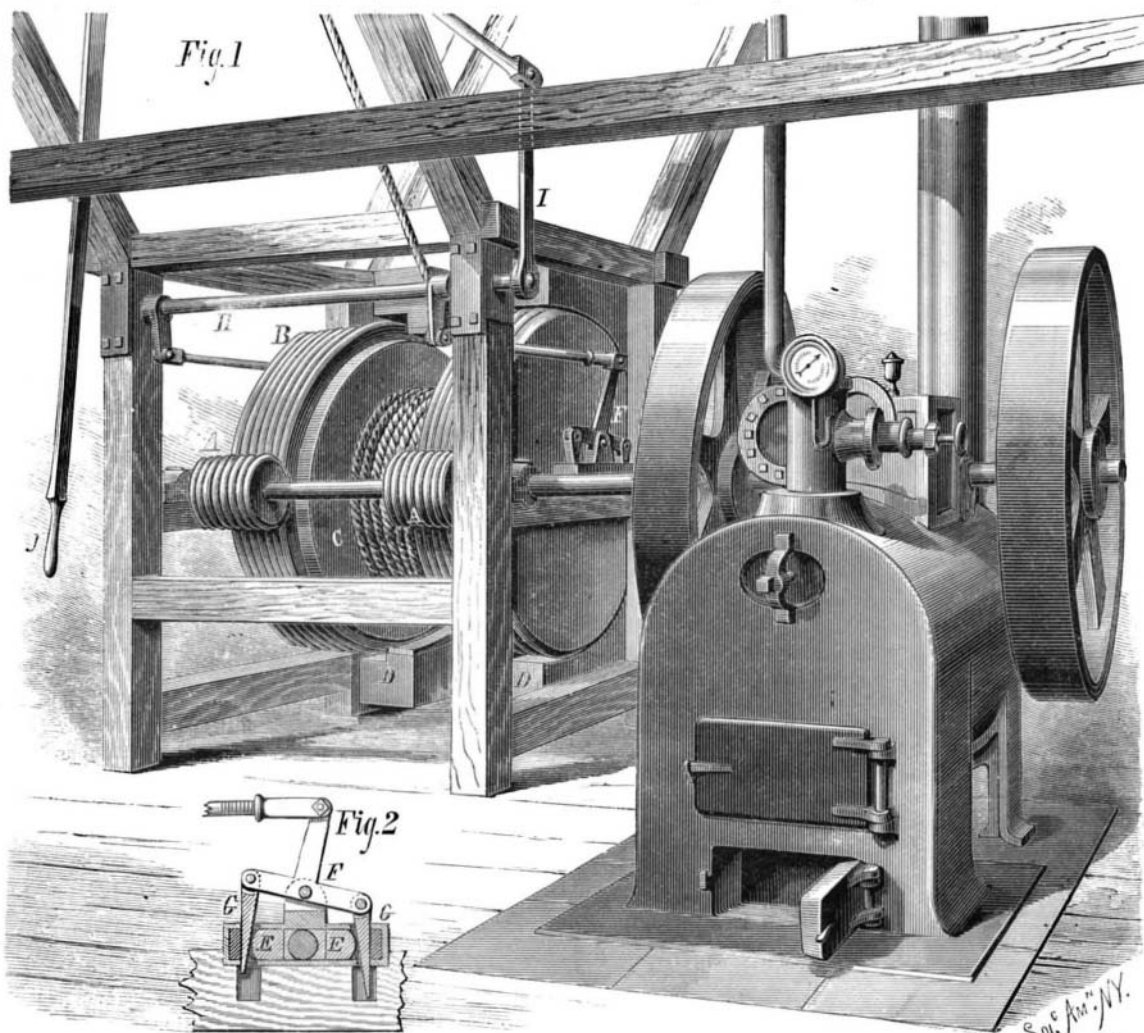
The green, gray, and black poni furnish the favorite timbers of the colony, and produce the hardest and most durable of wood. Their timber takes a fine polish, has a peculiar odor, and is very abundant. The trees are from three to four feet in diameter, and proportionately lofty.

**WISE'S ICE CREAM BEATER.**

dress the inventor, Mr. P. C. Johnson, Black Hawk, Colorado.

The Woods of Bahama and Trinidad.

There are many valuable timber trees in both these islands, whose wood is largely used for cabinet-making purposes. Horseflesh mahogany is sold for fancy prices in this country when good specimens are offered; but in Bahama it is principally used in house building, and the branches and crooked trees for ship timber. It is a very durable wood, and grows on several of the Bahama islands, but is found of large size and in greater quantities at Andros Island, where it grows to about 20 feet in length and 2 feet in diameter. It is, however, seldom brought out of the woods of that size,

**JOHNSON'S IMPROVED HOISTING MACHINE.**