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IMPROVED PORTABLE SAWMILL.

There is on exhibition at the Centennial a machine commonly known as the Canada sawmill, which has attracted much favorable notice both on account of the simplicity of its construction and the speed and accuracy with which it accomplishes its work. It was designed by the Waterous Engine Company, of Brantford, Ontario, Canada, expressly for use in the extensive lumber districts of the Dominion, to saw up the timber in the localities where it is felled, and thus to save the trouble and the expense of the carriage or rafting of the logs to distant points; and being portable, it may readily be moved from an exhausted part of a forest to a new situation. The machine is also excellently adapted for employment in shipyards, in most of which establishments in Nova Scotia and New Brunswick, we are informed, it has superseded whip sawing by hand.

In the annexed engravings, Fig. 1 represents the mill as it appeared at work while on exhibition at the Santiago (Chili) Exposition of 1875; and in Fig. 2 the portable boiler and engine are shown. The portable machine has a 20 horse power engine, which, together with its boiler, is of such weight and of such construction that both boiler and engine may easily be loaded on trucks, when changing the position of the mill, without any disconnection being necessary; so that the labor of a skillful machinist is not required to readjust the mechanism. The saw mandrel, feed, and gig work are compactly arranged in an iron frame, and can also be loaded and moved without being taken apart; so that, when resetting the mill, all that is necessary is to frame the foundation timbers previously used in the ground, set the mill on them, coupling the engine shaft and saw mandrel, lay the track, place the carriage on it, and the mill is then ready to start. The whole operation does not take more than from one to two days. The boiler is supplied with sawdust grates, by means of which it is enabled to keep up a full supply of steam with no other fuel than pine sawdust and refuse edgings. It is also covered with hair felting and lagged with wood or sheet iron. Its form is clearly shown in Fig. 2. The plates are of the best English material, and the heads are Lowmoor iron. Each boiler is subjected to 120 lbs. cold water pressure before shipment. The 20 horse power engine drives a 56 inch saw, which will, it is claimed, cut from 6,000 to 10,000 feet of lumber per day, or 1,000 feet of one inch pine lumber in a single hour. The 25 horse power engine, which is usually employed in connection with a tubular stationary boiler, drives any size of saw up to 66 inches, and its capacity is said to be from 8,000 to 12,000 feet of lumber per day.

At the Chili Exposition, the 20 horse power mill, we are informed, sawed and edged 1,060 feet of lumber in 40 minutes, vanquishing all competitors and gaining a medal and diploma. It has received the first premiums at ten Canadian Provincial Exhibitions, besides a highly favorable report from the judges at the Centennial.

To FIX fugitive colors in linens, muslins, etc., soak the fabric for an hour in a pail of water containing a tablespoonful of turpentine.

A Hint for Nervous Orators.

That distressing sensation known as stage fright, which often afflicts persons inexperienced in speaking before a large audience, can be removed by a few whiffs of either. Dr. William Fuller, of Montreal, says that either this remedy or a minute dose of morphia will remove all the spasm of the cerebral vessels, violent palpitation of the heart, and obviate the confusion and forgetfulness with which the sufferer is usually seized, so that he does not have to wait for symptoms of reaction to set in to allow him to "get warmed up," as the saying goes. Too large doses of either remedy,

of a liquid from the eye would be indicated, such as hydrophthalmia, staphyloma, detachment of the retina, absolute glaucoma, etc. Thus far the results have been encouraging.—*British Medical Journal*.

Open Air the Best Remedy for Consumption.

The conclusion reached by late observers is in favor of the open air treatment of consumption. The following case, given in the *British Medical Journal*, is illustrative: "An officer of a regiment contracted phthisis when stationed in the south of England. He was under medical treatment some time, and had the usual sick leave, but, on his return to duty, got worse again in the same way. The next time he was invalided with the upper lobe of the right lung seriously involved, in the third stage, with cavities; and he was examined by the usual medical board, and finally he sold out of the service and regiment. Under medical advice he took to traveling about this country and the Continent, to riding on horseback instead of walking, and attending meetings of the hounds frequently.

"Two or three years then elapsed, during which his case was withdrawn from my observation; and I was then surprised to meet him one day in the summer at Lord's cricket ground, looking quite recovered."

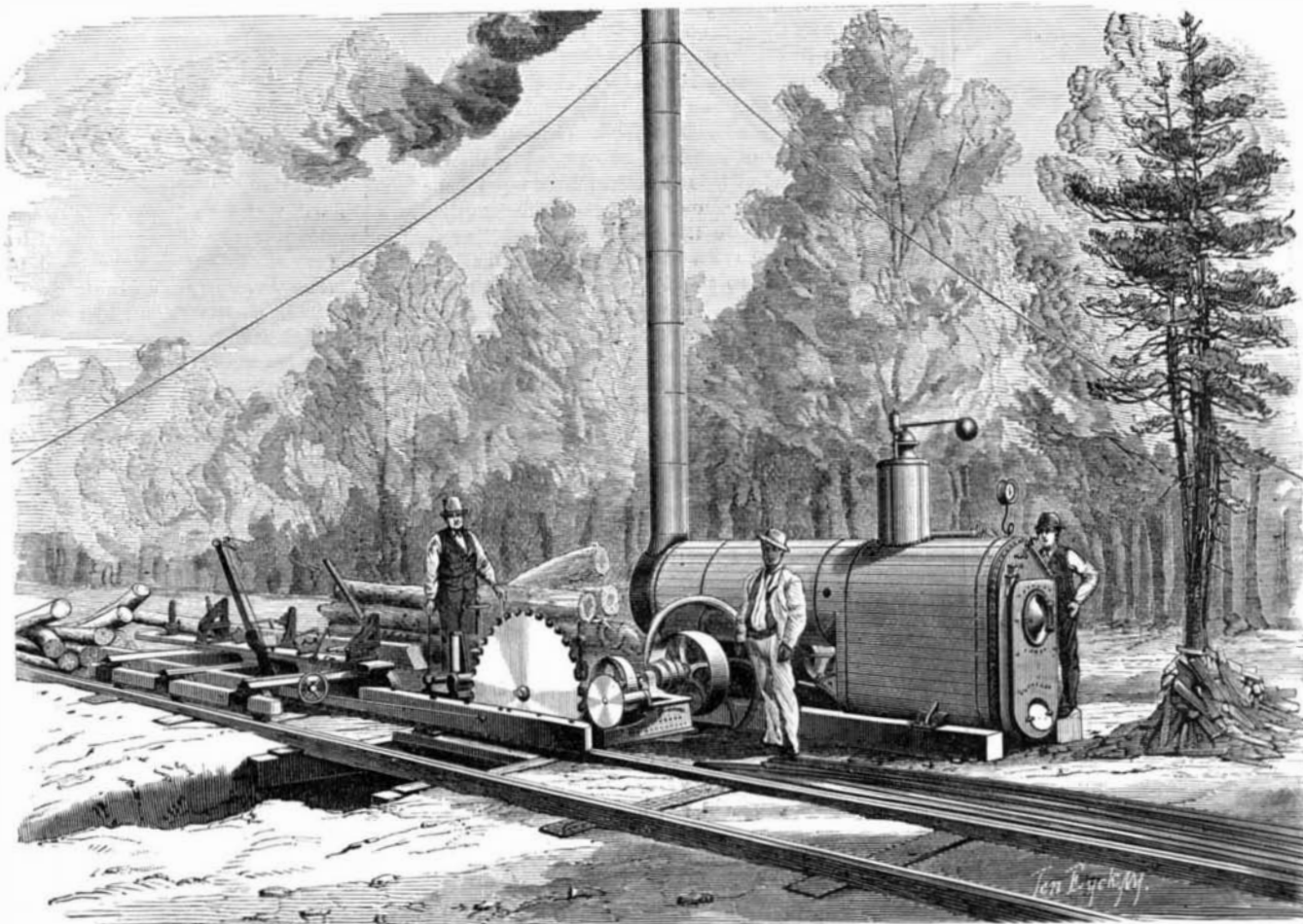
This report, by Surgeon Major W. T. Black, leads him to formulate the proposition: "It is living in the open air in a fine climate that is really beneficial for consumption, and not the mere climate of itself."

"If this is not new, it is at least too often forgotten," says the *Medical and Surgical Reporter*. "A friend of ours, a medical gentleman, who has suffered from phthisical symptoms, and has traveled largely, has lauded the climate of Northern Africa as best suited for open air life in winter. The recently published book of Dr. Arthur Leared, "Morocco and the Moors," informs us that at Tangier the accommodation is good and the cost of living decidedly cheap. The ordinary summer temperature ranges between 78° and 82° Fah. The mean temperature of winter is about 56° Fah."

Portland Cement on Woodwork.

Portland cement has many uses in the garden and elsewhere, not generally apparent. Some of them are enumerated by the *Garden* as follows: When made into a thin solution like whitewash, this cement gives woodwork all the appearance of having been painted and sanded. Piles of stone may be set together with common mortar, and then the whole washed over with this cement, making it look like one immense block of gray sandstone. For temporary use, a flour barrel may have the hoops nailed, so as not to fly apart, and the inside washed with a thin paste of Portland cement, and it will serve for a year or more to hold water. Boards nailed together and washed with it make good hot water tanks; and it is of use in so many ways that it may be regarded as one of those peculiar things in a garden which it is always good to have at hand.

A CUBIC inch of charcoal has not less than 100 square feet of surface in its pores.

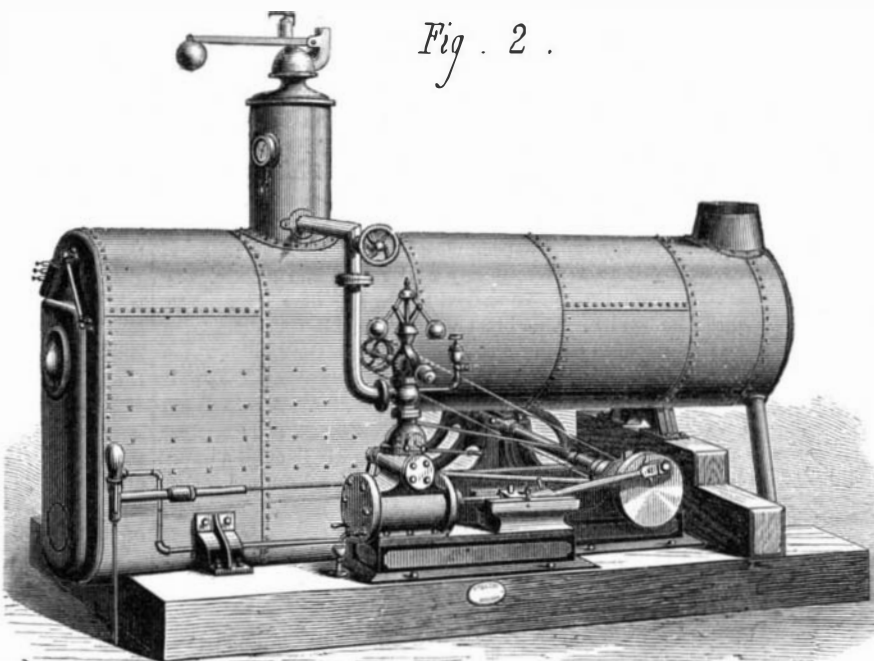


CANADIAN PORTABLE SAWMILL AT THE CENTENNIAL.

it should be remembered, produce the opposite condition of the vessels, quite as fatal to a successful result. An objection is that reliance on this means may lead to a dangerous habit.

Drainage of the Eye Ball.

Dr. D. Weeker has introduced another new operation in ophthalmic surgery. It consists of a system of drainage



effected by the introduction of a piece of gold wire through the membranes of the eye, which is so arranged that the patient is in no way inconvenienced by its presence. This new method is applicable to all cases in which the drainage