

The Famine in Russia.

So rapid has been the succession of startling events on this side of the Atlantic, especially since midwinter, that little thought or attention has been given to affairs in the more remote districts of Europe that have not had a political or warlike significance. Hence, it will doubtless be a matter of surprise to many to learn that a widespread famine has existed in the agricultural regions of Russia since last autumn, affecting 40,000,000 of people. Had such condition of affairs been ascribed to Siberia, it would doubtless excite little comment, for the majority have been taught to believe the North-Asian portion of the Muscovite empire is a bleak, dreary, inhospitable region—a desert of rocks and sand in summer, a waste of ice and snow in winter, peopled by convicts, political exiles and fierce and savage Cossack cavalry. But Siberia experiences no famines; its population for the most part are happy, prosperous and well contented; its soil rich and variable, yielding an abundance to ordinary agricultural toil. Siberia is to Russia, in fact, what the "Far West" was to the Eastern States of our own country, or what the Great Northwest now is to Canada—the goal and ambition of the poor.

According to the Continental press, the existing famine is constantly increasing and enlarging its boundaries; worse, many of the famine districts are now ravaged by typhus in its most virulent form, "hunger typhus," the inevitable concomitant of unhygienic surroundings and lack of proper nourishment. Space will not permit of enumeration of a tithe of the horrors declared to exist; it can only be said the pictures drawn of the suffering millions of peasantry are distressing and heartrending in the extreme. The services of man and horse have been offered for a daily wage of eight cents. The thatches of dwellings have been pulled down to feed the cattle of the sufferers, and later the creatures themselves bartered away at forced sale to meet the necessities of their owners. Cows and horses "go begging" at four rubles (approximately \$2) per head. Thousands upon thousands are seeking to eke out life by means of bread made from the barks of trees, leaves, chaff, etc., with a modicum of black rye flour added; and every available hedge, the byres and other out-houses have been utilized as fuel; while a few, more fortunate, have fallen under the ban of the forestry laws by reason of gathering fagots, and are assured of sufficient food, such as it may be, to keep soul and body together while serving out their sentences, though wives and children perhaps are dying. In some regions the hereditary owners of the soil have attempted to mitigate the suffering existent upon or in the vicinity of their estates, and distributed fuel and food; have even made the forests free to the needy for the gathering of dead wood; but in the majority of instances, the proprietor is represented by a steward who regards the tortures of the peasant with complaisance and insists upon the "pound of flesh" in the way of dues accruing to his master.

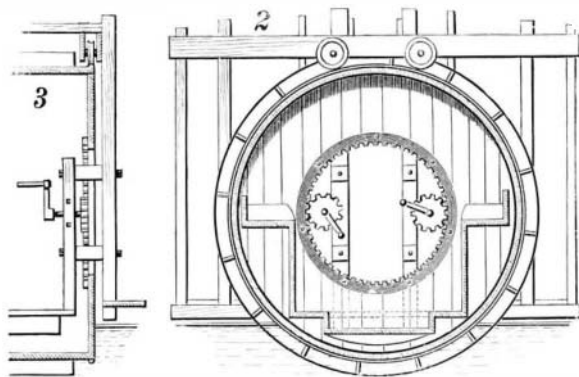
The Muscovite authorities, long persistently silent, have at last been forced, by the insistence and positive attitude of the European press generally, to enter upon an "explanation"—an explanation that seems to have for its chief purpose the quieting of alarm rather than any utterance of facts. The "official document," which is very like all documents emanating from the same sources, proves, however, to be in a measure stultifying. It admits that last year the crops wholly or practically failed in nineteen provinces, with a population of forty millions, but adds the private accounts of general starvation, of typhus, and other effects of lack of nourishment, are all "exaggerated," and that the items published are "only the ordinary appearances of poverty and want to be met with in the existing conditions of life among agricultural as well as other classes of population."

Commenting on the famine, Public Opinion (London) calls attention to the fact no such dire and tar-

reaching disaster has ever overtaken Poland, Finland, or the Baltic Provinces, probably for the reason the bulk of population in these districts is made up of those non-Russian by origin, non-orthodox—that is, do not affiliate with the Greek Church—and who stand generally on a higher level of civilization; that they still enjoy remnants of their old social institutions, which help them in an organized manner to combat the elements of nature, to mitigate the effects of droughts, and generally to be prepared to meet any possible calamity.

THE ROLLER BOAT THAT ACTUALLY WENT TO SEA.

In view of the more ambitious designs for a successful roller boat which have been laid down and actually



DETAILS OF THE BECKMAN ROLLER BOAT.

built, the accompanying views of a home-made craft of this type, which was built and launched on the coast of Maine, have considerable interest. This curious craft actually started on an Atlantic voyage, manned by a crew of two men, or rather a man and a boy, the owner demonstrating his own faith in his seagoing barrel by taking his young son with him. Our readers will not be surprised to learn that the maiden voyage was disastrous, and that after rolling or rather being blown out to sea for fifteen miles, the crew were glad to exchange their swinging platform for the solid deck of a seagoing freighter. The vessel consisted of a cylindrical barrel about 10 feet in diameter and 12 feet in length, which was built of staves and hooped in the usual barrel fashion, and carried on its surface a series of parallel floats or paddles. Around each end of the barrel was laid a circular track of iron, on which, by means of two pairs of wheels, a working platform was

frame and inner platform were so adjusted that they would always swing in a horizontal position.

The rolling motion was imparted to the boat by means of hand cranks and gears which meshed in a large circular gear, bolted to the ends of the barrel, as shown in the engraving. The forward movement of the boat was due to the paddles or floats arranged on the periphery of the barrel. The only contact between the frame and the barrel was at the four points where the carrying wheels rested on the circular track. The interior of the boat was furnished with a couple of bunks and storage room for food, baggage, and a cooking galley. On his first and only trip, Peter Beckman started from Bar Harbor, Me., on September 23, and passed out by the breakwater to the open sea. Under the joint action of the hand cranks and the wind, the strange craft traveled for fifteen miles at the rate of six miles per hour. As was to be expected, however, the intrepid mariner found that the wind was his master, and after drifting for some fifteen miles before the breeze he was hailed by the freight steamship "Pentagoet," bound for New York, and taken on board. At Mr. Beckman's earnest solicitation an attempt was made to tow the rolling boat; but after the hawser had parted, the craft was left to continue its voyage alone across the Atlantic.

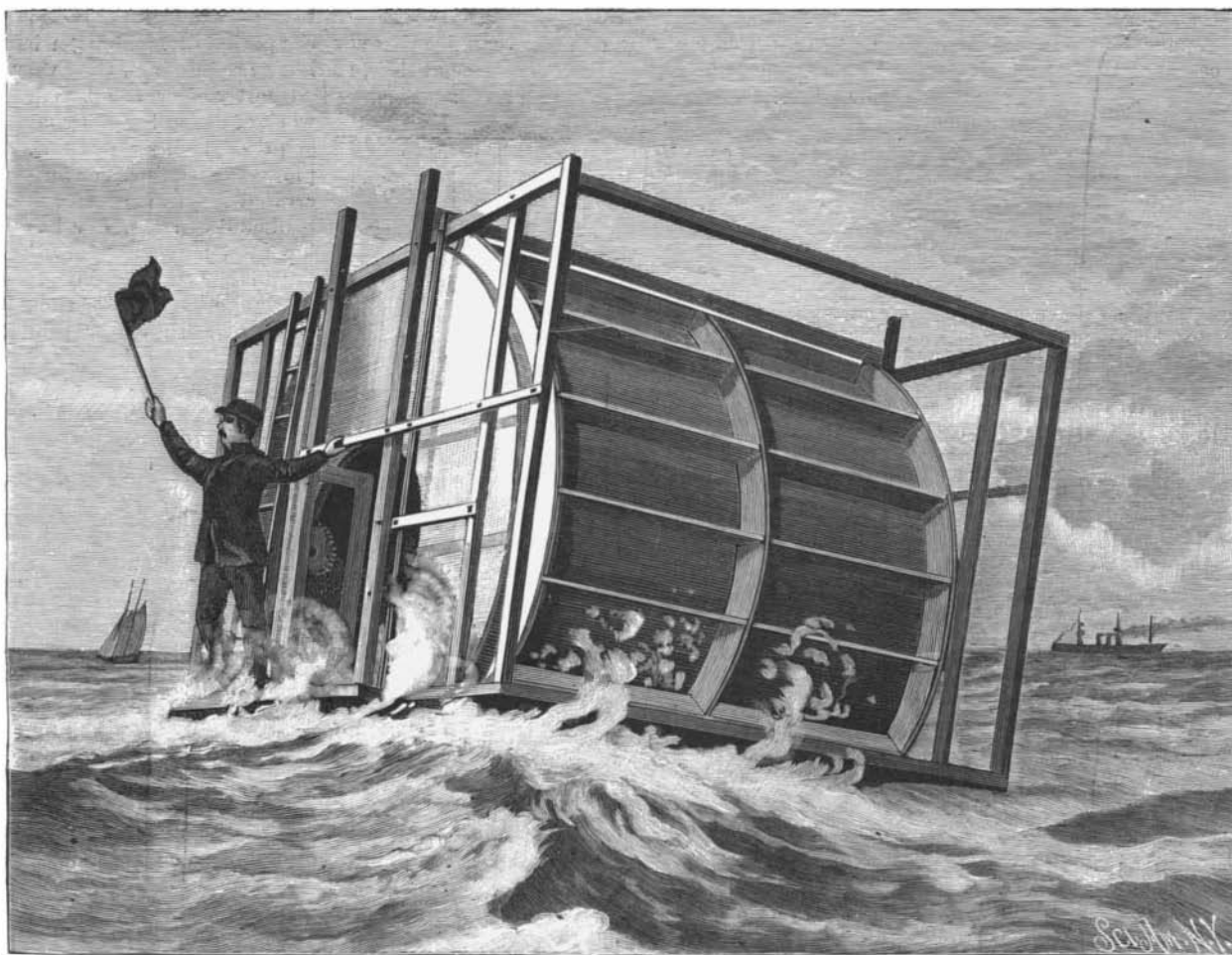
Disturbing Nature's Balance.

The great and growing cost of the attempts in Massachusetts to exterminate the gypsy moth shows how serious may be the consequences to "the balance of nature" by the introduction of foreign insects or animals. A few of these moths were imported some years ago by an entomologist residing near Boston, says The New York Times. Several of the captives escaped from custody, and the State has spent \$450,000 in the last four years in a vain attempt to exterminate their descendants. It is now estimated that at least \$1,575,000 will be required, and that the appropriation for five years to come should be \$200,000 per annum. On the other hand, a perpetual appropriation of \$100,000 per annum would serve to confine the moths to the district in which they are now found. The problem resembles that which has taxed the resources of the Australian colonies since the progeny of half a dozen rabbits, imported from England, became so numerous that the maintenance of agricultural industries was menaced by their depredations.

Australia has expended millions in rabbit-proof fences and in devices for killing off the rabbits. But, although bacteriologists have endeavored to remove them by disseminating the germs of fatal disease, the colonists have thus far been able to do no more than

hold the animals in check. In Florida several rivers have recently become choked by the rapid growth of a kind of hyacinth imported a few years ago, and considerable expenditures will be required to keep the streams open for navigation. An imported insect called the black scale menaced the fruit industry in California until the State procured from Australia and introduced in the orchards a little beetle which ate the obnoxious insects, and thus brought relief.

These and other instances which might be cited show that the utmost caution should be observed with respect to the introduction into any country of insects or plants for which nature has made no preparation there, and the growth of which may not be restrained by natural



PETER BECKMAN LEAVING BAR HARBOR, MAINE, IN HIS ROLLER BOAT.

carried and maintained in a horizontal position during the rotation of the barrel. The outer frame was made slightly larger than the barrel, and carried at each end of it a couple of stout vertical standards, as shown in Figs. 2 and 3. From these standards four horizontal transoms projected into the interior of the barrel through openings in its ends. Here they were bolted to a couple of vertical posts which formed part of an interior platform or cabin. The platform served as the living quarters of the crew. The weights of the outer

enemies and checks with which they must contend in the countries from which they are brought.

DURING the first three months of the present year the North Sea-Baltic Canal has been used by 3,437 vessels, with an aggregate net tonnage of 432,503 tons, against respectively 2,233 vessels and 308,557 tons for the same period last year. The receipts were 232,599 marks (£11,600), against 161,441 marks for the same period last year.