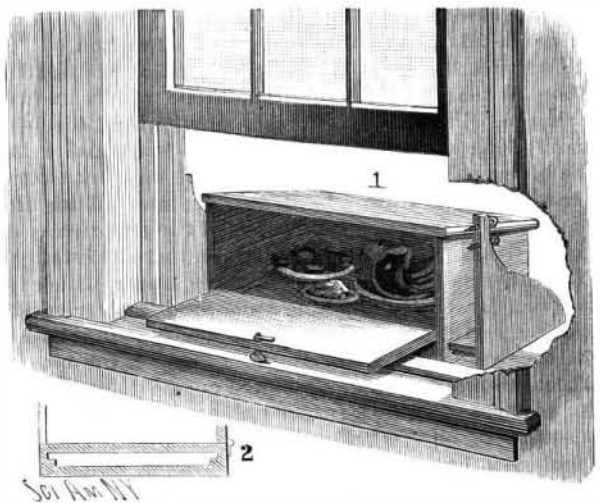


AN INEXPENSIVE WINDOW LARDER.

The illustration represents a box or larder which may be easily fastened in position in windows of varying widths, so that provisions or other contents of the box may be better protected by being kept in a receptacle exposed to the outside temperature. The improvement has been patented by Mr. James Ponisi, of No. 1014 Third Avenue, New York City. The box has a slanting, overhanging cover, and beneath its bottom is a longitudinal slideway, the slides in which have considerable movement outward from the ends of the box, and have at their outer ends curved braces adapted to be secured to the frame of the window. The box is designed to rest on the window sill, and when the slides are adjusted they may be fastened to

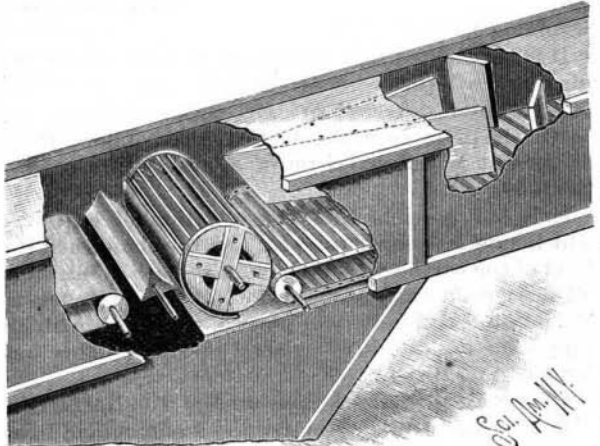


PONISI'S WINDOW LARDER.

the sill by screws or other means. On the inner side of the box is a swinging lid with a suitable catch or lock. The box is preferably made with a false bottom beneath the slides, and, if desired, the top may be of non-conducting material to prevent the heating of the box and its contents by the sun.

A THRASHING MACHINE ATTACHMENT.

The engraving shows a device which receives straw from the thrashing cylinder of a machine, and loosens and fans it in such manner that the chaff will be separated from the straw, permitting the grain to fall down



KEELING'S THRASHING MACHINE ATTACHMENT.

through the straw and rattle rake. It is a patented improvement of Mr. Richard Keeling, of Walhalla, North Dakota. At the rear of the apron or carrier belt of the thrashing cylinder of the machine is a three-cornered picker, back of which is a combined blower and beater driven by a shaft journaled in the casing. Still further back is the rattle rake, above which is a divide board secured to the deck of the casing, and pointing to the central portion of the beater, two deflecting plates, some distance apart, and having a rearward inclination, being placed back of the divide board. As the grain passes up the endless belt from the thrashing cylinder, the straw is loosened and tossed by the picker to the blower and beater, being thrown up by the blades of the latter, while the current of air created by the revolving of the blower blows the chaff from the straw. The divide board separates the air current, and the chaff is carried rearward at each side through the rear outer end of the machine, the straw falling upon the rattle rake being comparatively free from chaff, and the grain being more readily separated therefrom. The current of air is designed to be at all times sufficiently strong to prevent the straw from winding about the beater. The attachment may be applied to any form of thrashing machine.

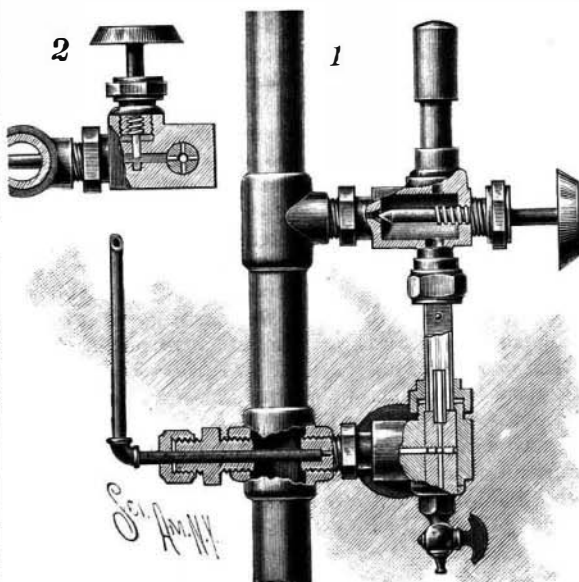
THE AERMOTOR COMPANY, whose fine representation in the windmill exhibit at the Columbian Exposition was mentioned in the SCIENTIFIC AMERICAN of June 3, is located at Twelfth and Rockwell Streets, Chicago, and not at Batavia, Ill., as was inadvertently stated.

Recreation for Middle Age.

Mere walking exercise, although it is invaluable, hardly fulfills the idea of perfect recreation. Sir James Paget says "good active recreations" ought to include "uncertainties, wonders and opportunities for the exercise of skill in something different from the regular work." The present writer is always longing for cricket in the summer and football or hockey in the winter and spring. But he cannot find a man anywhere above forty years of age who will agree with him. Why should the literary man, the doctor, and the stockbroker or the merchant not play cricket after forty-five? What is to become of his dinner hour, is it asked? If a better luncheon were taken at midday, and a lighter dinner at six in the evening, there is no reason whatever why a man of forty-five, and up to sixty-five or seventy, should not be in the cricket field at half-past seven and play briskly until nine or half-past. An hour and a half at cricket after a light dinner would make middle-aged men so young that they would not know themselves. Writers would write twice as brilliantly, and business men would be cleverer and keener by half. As it is the average middle-aged Englishman of the professional and business classes grows fatter, wheezier, more pompous, and more dull and uninteresting every year of his life. To get a laugh out of him is impossible; to crack a joke at his expense is to commit the unpardonable sin. "Poor old porpoise," as somebody has called him. His innocent pleasures have vanished with his youth, and "he has nothing now left to live for but his respectability: his solemn respectability, and his money bags." The contrast between the youthful Englishman and his middle-aged parent is sometimes startling. The former is all life and fun: the latter is a moving mountain of ponderosity and fat. It is all for want of outdoor exercise and recreation. Twenty-five years ago the solemn father of to-day was the fun-loving son of a middle-aged father. If anybody had then shown him in a prophetic mirror the figure he would cut at the end of a quarter of a century, he would have committed suicide in sheer vexation and disgust. But all this rotundity, wheeziness, irritability of temper, incapacity for work, and general disgust with life and all things in it can be cured, cured easily, and cured for ever; and the cure for the vast majority of cases is one or two hours' daily exercise and recreation in the open air.—Hospital.

AN IMPROVED LUBRICATOR.

The engraving shows a lubricator adapted to properly feed any grade or quality of oil in either an up or down direction. The improvement has been patented by Mr. Henry C. Roller, of New Castle, Del. The oil tank is connected by a pipe with the boiler, so that the oil will be in contact with the steam, and under the influence to some extent of the boiler pressure. The supply pipe from the tank is passed through the steam pipe into which the lubricant is to be discharged, so that the oil may be heated. The supply pipe connects with a casing supported from the steam pipe, as shown in sectional plan view in Fig. 2, and in side elevation in Fig. 1, the casing having a valve controlling the quantity of lubricant entering. The casing also connects with a sight feed tube, and the latter is connected with a second casing discharging into the steam pipe to be lubricated, the quantity of oil and steam to be passed through being regulated by a valve. On the top of the second casing is a steam condensing chamber, the water of condensation from which fills the sight feed tube, while a drip cock at the bottom facilitates cleaning the tube. To feed the oil downwardly the positions of the casings are reversed and the condensing chamber is omitted. As shown in the illustration, the oil from the supply tank is forced into the first casing partly by the displacement due to the condensation of steam and partly by the boiler pressure, so that the oil rises

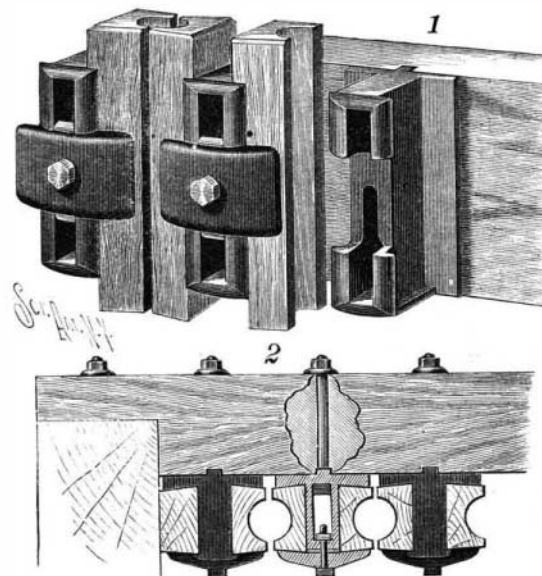


ROLLER'S SIGHT FEED LUBRICATOR.

in drops in the sight feed tube, passing through the second casing into the steam pipe. In feeding downward the oil enters the first casing under boiler pressure, and is forced downward through the sight feed tube, to be finally passed through the second casing into the steam pipe. As the lubricant is under the boiler pressure, any grade of oil can be readily fed, and the casings may be placed sufficient distance apart to provide for any desired length of sight feed tube.

A STAMP MILL GUIDE.

By means of this guide, which has been patented by Mr. Edmund Major, of Terraville, South Dakota, the bearing blocks are securely held in place and can be readily adjusted whenever desired on account of wear or other causes. Fig. 1 shows the application of the improvement, Fig. 2 being a plan view, with parts in section. On the front of the girt or rail, secured by bolts or other means to the battery posts, are formed vertical recesses, into which fit ribs projecting from the backs of keepers secured in place on the girt by bolts. Each keeper is in the shape of an open casing, its back being engaged by the bolts, whose heads extend into the casing. On the rear of each keeper are side flanges with front beveled faces to receive the correspondingly shaped rear side of the bearing block, and on the front of each side of the keeper are short flanges, there being a recess near the middle to be engaged by a flange plate, held in place by a bolt, by screwing up which the bearing blocks are firmly held in position. The sides of the blocks are beveled to correspond to the inclination of the sides of the keepers, so that the blocks are free to slide upward and out of contact with the keeper, or they may be held in fixed position by means of the flange bolt, and when the blocks be-



MAJOR'S GUIDE FOR STAMP MILLS.

come worn by the vertical movement of the stamp stem they may be adjusted by placing a thin piece of wood between the keeper and guide block.

Plug Wheat.

A gentleman who has been down in the Red River Valley tells of a new way the honest farmer has of getting even with the elevator companies. There is considerable of last year's damaged wheat in the locality referred to, which is not salable at the elevators. So the ingenuity of the sons of toil was brought to bear to contrive some way to make them take it. Finally the following plan was devised:

The bottom of a grain sack is filled with good wheat. A length of stove pipe is inserted in the center of the sack and filled with the rejected wheat. The sack is then filled around the stove pipe with good wheat and the pipe withdrawn, and on top of this is put good wheat. In this manner a neat "plug" of rejected wheat seven inches in diameter and two feet in length is inserted in the center of each sack, and is so surrounded by good wheat that it is almost impossible to detect it when dumped into the hopper, especially if the contents of a sack which has not been "plugged" are immediately dumped on top of the contraband wheat. It is said to be a scheme which will circumvent the most eagle-eyed elevator man.—Valley City (N. D.) Times-Record.

An Early Plan for an Electric Railway.

The following item is given on page 37 of the Pictorial Times, London, of January 17, 1846:

MAGNETIC RAILWAYS.

Experiments of a highly satisfactory nature are being made with regard to the application of electromagnetism to railway propulsion. The great difficulty to be surmounted is the weight and size of the galvanic batteries requisite for sufficient energy. To obviate this difficulty, it has been proposed to have stationary batteries at regulated distances and to make the rails themselves the conducting lines of the batteries.