

IMPROVED COFFEE POT.

In this pot the coffee is made by the percolation of hot water through the ground coffee. To the cylindrical portion of the percolator is secured a conical part, which fits into the top of the ordinary coffee pot in place of the usual cover. To the smaller end of the conical part is fitted a ring, hinged at one side, and the wired upper edge of which engages, when the ring is closed over the end, with a raised ridge on the opposite side of the conical part. A piece of cloth is placed over a basket formed by two downwardly convex bars secured to the lower end of the cone, and the hinged ring is then closed in place over the end. The ground coffee is placed in the basket, where it is supported by the cloth, and the coffee is extracted by pouring hot



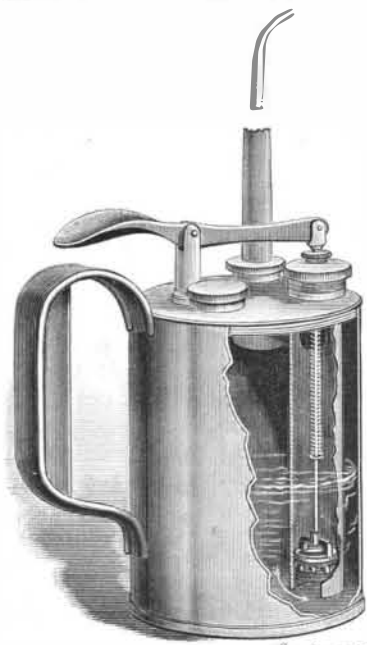
CORNISH & MOORE'S IMPROVED COFFEE POT.

water through it, the extract being received in the coffee pot. When the cloth becomes clogged or otherwise unfit for use, it may be readily detached by removing the ring.

This invention has been patented by Messrs. H. B. Cornish and J. B. Moore, of Blue Earth City, Minn.

IMPROVED OILER.

The accompanying engraving represents a new and improved oiler possessing many excellent points.



When the handle is grasped by the hand, the broadened end of a lever is within convenient reach of the thumb. The opposite end of this lever, which is fulcrumed on a standard projecting from the top or cover of the can, is pivotally connected with a rod passing through a stuffing box, and carrying at its lower end a plunger that works in a cylinder extending nearly to the bottom of the can. In the lower end of the cylinder of the cylinder and in the plunger are valves, both of which open upward. The plunger is pressed downward by a spring encircling its rod. From the top of the cylinder leads the spout. The top screws into the body of the can, which is fitted through an opening in the top, closed by a screw cap. As the lever is worked by the thumb, the oil is forced by the pump out through the spout. It is evident that from this construction the oil can be thrown from the oiler when held in any position, thus enabling the operator to oil machinery overhead, near walls, posts, floors, etc., at any point that can be reached by the spout. No wasting of oil can occur, as the spiral spring forces the piston firmly down upon the lower valve, thereby making the cylinder air tight, and preventing the flow of oil. By controlling the pressure of the thumb upon the lever, the flow of the oil from the spout can be easily regulated to meet the requirements of the parts being oiled. These oilers are made in steel and brass, and one style, which is practically indestructible, is especially adapted to the use of locomotive engineers. A sample oiler can be had by addressing the Draper Oiler Co., of East Cambridge, Mass.

This oiler is the invention of Messrs. T. B. Wilkinson and J. L. Cutler, whose address is care of Draper Oil Co., as above.

Metallic Cement.

The *Chemist and Druggist* (London) tells us that the cement which was used in the restoration of the colonnade of the Louvre, of the Pont Neuf, and of the Conservatoire des Arts et Metiers, consisted of a powder and a liquid, prepared according to the following formulae:

1. Two parts by weight of oxide of zinc, two of crushed limestone of a hard nature, and one of crushed grit, the whole intimately mixed and ground. Ocher in suitable proportions is added as a coloring matter.

2. A saturated solution of zinc in commercial hydrochloric acid, to which is added a part, by weight, of hydrochlorate of ammonia equal to one-sixth that of the dissolved zinc. This liquid is diluted with two-thirds of its bulk of water.

To use the cement, 1 pound of the powder is to be mixed with 2½ pints of the liquid. The cement hardens very quickly, and is very strong.

Deterioration of the Mental Faculties.

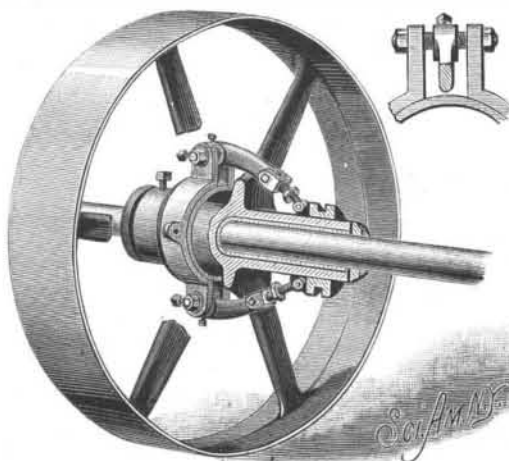
There is as much danger of hurting the brain by idleness as by overwork. According to a writer in *Faith and Work*, Dr. Farquharson argues that intellectual power is lessened by the listlessness in which the well-to-do classes generally spend their lives. Under such conditions, the brain gradually loses its health, and although equal to the demands of a routine existence, is unable to withstand the strain of sudden emergency. So, when a load of work is unexpectedly thrown on it in its unprepared state, the worst consequences of what may be called overwork show themselves. Similarly, a man accustomed to sedentary pursuits is liable to be physically injured by taking suddenly too violent exercise.

As to the amount of mental work that may safely be done, Dr. Farquharson says: "So long as a brain worker is able to sleep well, to eat well, and to take a fair proportion of out-door exercise, it may safely be said that it is not necessary to impose any special limits on the actual number of hours which he devotes to his labors. But when what is generally known as worry steps in to complicate matters, when cares connected with family arrangements, or with those numerous personal details which we can seldom escape, intervene, or when the daily occupation of life is in itself a fertile source of anxiety, then we find one or other of these three safeguards broken down."

FRICITION CLUTCH PULLEY.

In this friction clutch pulley the clamping and clutching devices, which cause the pulley to revolve with the shaft, are detached from the shaft when the pulley is stopped, and the shaft then revolves in the clutching devices as well as in the pulley. The pulley is loosely mounted upon the shaft, and is formed with an elongated hub. A drum, secured to the shaft and projecting over one end of the hub, is surrounded by a split band, each half of which is connected with the web of the pulley by a bolt extending through a short radial slot in the web. Each half of the band has ears, which are apertured to receive nuts (shown in the small view), which are clamped in the apertures by set screws, the nut in the ears of adjoining ends of the band being threaded, one with a right hand and the other with a left hand thread, and in the nuts are placed right and left hand screws. To these screws are secured curved levers, which are connected by rods with a sliding collar placed on the hub. The collar is circumferentially grooved to receive the forked arm by which it is moved on the hub. When the collar is moved toward the split band the screws are turned, through the action of the connecting rods and levers, in the direction required to draw together the split band upon the drum; and as the latter revolves continually with the shaft, when the band is tightened down upon the drum it will revolve with the drum and carry the pulley with it. When it is desired to stop the pulley the collar is moved backward, thereby turning the screws to release the band from the drum, when the pulley and clutching parts will remain stationary.

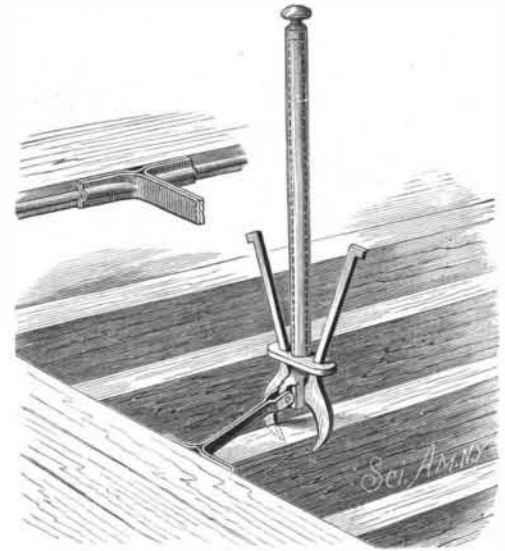
This invention has been patented by Mr. James E. Hunter, of North Adams, Mass.



HUNTER'S FRICITION CLUTCH PULLEY.

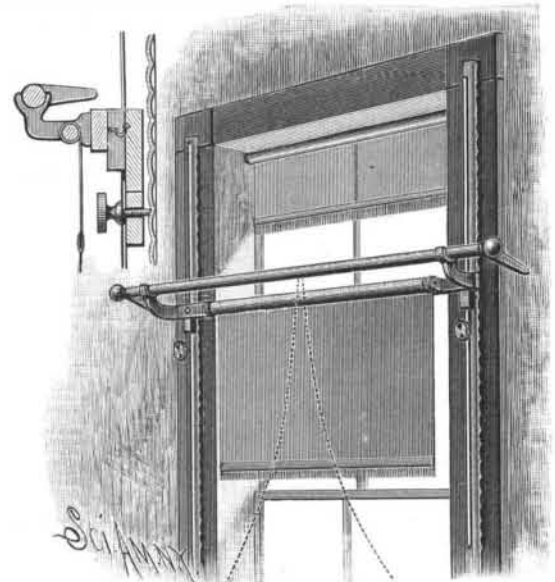
A SIMPLE FLOOR CLAMP.

This new and improved clamp is for pressing floor boards in place. On opposite sides of the end of a bar of suitable size are pivoted two gripping levers, shaped as shown in the engraving. The upper arms of the levers fit in holes formed in a plate secured to the lower end of a sleeve adapted to slide on the bar. The upper ends of the arms are formed with lugs, to prevent the



GOOD'S SIMPLE FLOOR CLAMP.

plate from being removed. In lugs formed on the end of the rod is pivoted, at right angles to the gripping levers, an arm carrying the pressing plate, provided at its middle with an inward bend, and with transverse grooves running from the outer ends to the bend, and conforming to the shape of the tongues of the boards, as shown in the upper figure. The hooks of the levers are opened by sliding the sleeve carrying the plate upward on the bar, when the tool is placed in position on the floor beam, so that the pressing plate rests on the edge of the board. The sleeve is then quickly moved



HATCHER'S ADJUSTABLE LAMBREQUIN, CURTAIN, AND SHADE SUPPORT.

downward to cause the hooks of the levers to close and impinge on the joist. The bar is then swung toward the floor boards, the fulcrum being the hooks on the joist, so as to press the floor board into place.

This invention has been patented by Mr. Milton D. Good, of Hope, Dickinson County, Kan.

ADJUSTABLE LAMBREQUIN, CURTAIN, AND SHADE SUPPORT.

Attached to the casing at each side of the window is a tubular metallic column, formed with corrugations upon the side next the window. Sliding within the columns are short metal rods, having near their lower ends apertures into which set screws are entered to a bearing upon the corrugations, as shown in the sectional view. The upper ends of the rods are secured to a transverse bar, which may, if necessary, extend the width of the window casing. Secured to the ends of this bar are brackets, in the concave outer ends of which rests a lambrequin pole having rearwardly extending arms at each end. Within the casing, next the window, is the usual automatic spring roller and curtain. To the transverse bar are attached any suitable curtain brackets, hanging in which is a curtain, and above the whole, upon the pole, is placed a lambrequin which extends around at the sides over the end arms. It will be seen that the sliding rod have a free parallel vertical movement in the tubes, and through this movement the transverse bar and brackets and the curtain and lambrequin attached to them may be either raised or lowered. The admission of light to the room is thus under complete control.

This invention has been patented by Mr. J. A. Hatcher, of Neodesha, Kansas.