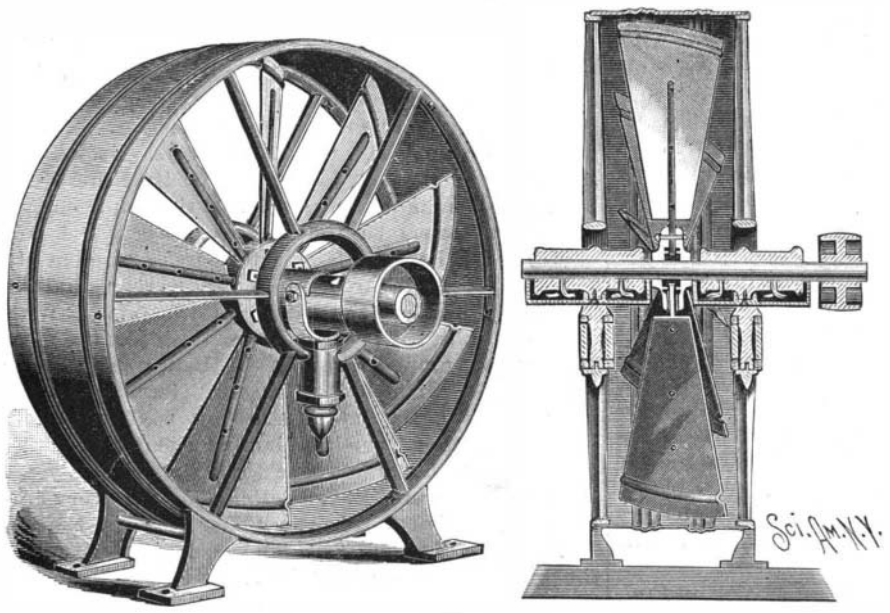
AN IMPROVED VENTILATING FAN.

The illustrations herewith show a ventilating fan, and means for adjusting the hub thereof, by which the blades can be readily fixed at any desired angle of inclination, by simply loosening three nuts on bolts passing through the hub, thus increasing or diminishing the capacity of fan and power required. The hub is divided in two vertical sections, with opposing integral rings having a series of recesses, and a series of triangular projections with angular spaces betweenthem, an annular recess separating the ring and projection of each section. When the two sections are united upon an axle, the flat surfaces of the triangular projections and the ring come in contact, forming a close joint, and a series of irregular openings in the edge, formed by the registering angular spaces. When the hub is slid upon the shaft, the fan rods are entered in the irregular openings, a groove in the rod being made to engage a concavity in the ring. The fans may then be given any desired inclination by turning the rods more or less to the right or left, when they will be held by the engagement of the lower portion of the rods with the ring, the two sections of the hub, when the rods have been placed in position, being held in positive yet detachable connection by a series of bolts.

These fans are so made as to be convenient for pipe connection, and a change of air current is readily effected by simply loosening the three nuts on bolts passing through the hub, and changing the inclination of the fan blades. The style of fan herewith shown can be placed either horizontally or vertically, the "feet"



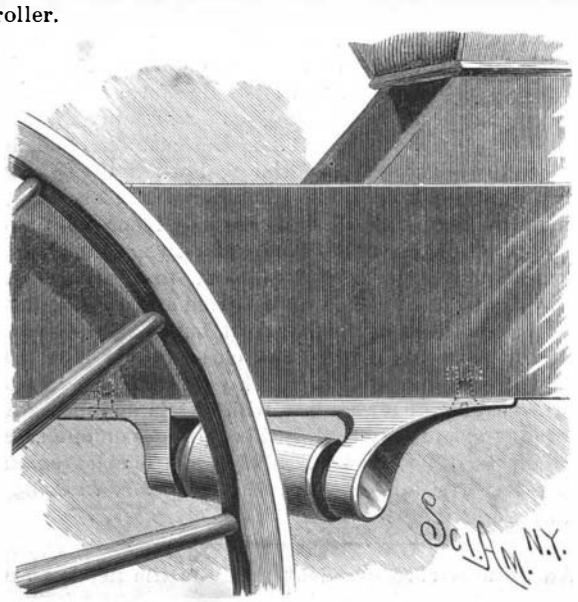
CLARK'S ADJUSTABLE HUB VENTILATING FAN.

being such as can be attached overhead, on the side of buildings or partitions, or upon the floor.

For further particulars touching this invention, address the patentee and manufacturer, Mr. George P. Clark, of Windsor Locks, Conn.

AN IMPROVED WEAR PLATE FOR VEHICLES.

The wear plate herewith illustrated provides a simple means to prevent the forward wheels of a vehicle from marring its body in turning sharply, the device also assisting the wheels in making the turn. The invention is the subject of a patent recently granted to Mr. Burton W. Beach, of Cornwall, N. Y. The construction of the device will be readily understood from the illustration, the wear plate being made with integral ears for ready attachment beneath the vehicle body, and a roller being journaled and held to turn therein flush with its angular edge. The surface of the roller is preferably covered with rubber or a similar elastic material, in order that a hard surface may not be presented to the tire, and to prevent any unpleasant sound from the contact of the vehicle wheel and the roller.



BEACH'S WEAR PLATE FOR VEHICLES.

IMPROVED PORTABLE FORGES.

In the accompanying illustration, Fig. 1 represents an old style forge for horseshoers, but having an improved tuyere iron; Fig. 2 shows a forge for general blacksmithing, and Fig. 3 is a modification of the old style forge, with square top, giving more hearth room and better access to the work, the latter also embodying the details of a recently patented invention. It has a square hearth, with a central depression having an aperture, beneath which is fitted a tuyere iron, having a triangular damper, the latter being controlled by the small crank arm shown just beneath the front opening of the forge, by which the blast may be instantly varied from light to heavy, the blast being communicated through a draught pipe which projects outward through the base. Below this crank is a handle, which operates a slide at the bottom of the tuyere iron, the slide being adapted to dump any dead coal or ashes that may be delivered from the fire by the triangular damper. The corners of this damper are made round to facilitate turning, and by its peculiar shape the fire is readily kept clean.

For further information about these forges address the patentee and manufacturer, Mr. Michael Ehrgott, Nos. 234 to 242 Greene Street, Greenpoint, Brooklyn, E. D., N. Y.

EHRGOTT'S IMPROVEMENTS IN PORTABLE FORGES.

Regulation of Liquor Traffic.

Journals conducted in the interests of the rum sellers deny the right of any one to interfere with a man who wishes to buy and to drink any beverage that he desires. This sounds like a defense of personal liberty, but it is mere nonsense.

1. No man has any right to carry on a business which produces results for which other men must payheavily. The taxes of every citizen are more than doubled by the evils which flow directly from the rum traffic. The rum sellers wax fat, and the mass of taxpayers pay millions of dollars every year that they may have the privilege of doing so.

2. No man has any right to carry on a business which corrupts the morals of other men. Nine-tenths of the crime in this country springs directly from the rum traffic. It corrupts the young, debauches the old, destroys families, cripples workmen, makes politics vicious, defies the Sunday laws, wastes the people's substance, injures trade, and produces pauperism, theft, murder, and insanity. If society has no right to meddle with such a monstrous public nuisance as this, then it has not the ordinary right of self-preservation. —*Textile Record.*

Consumption of Liquors.

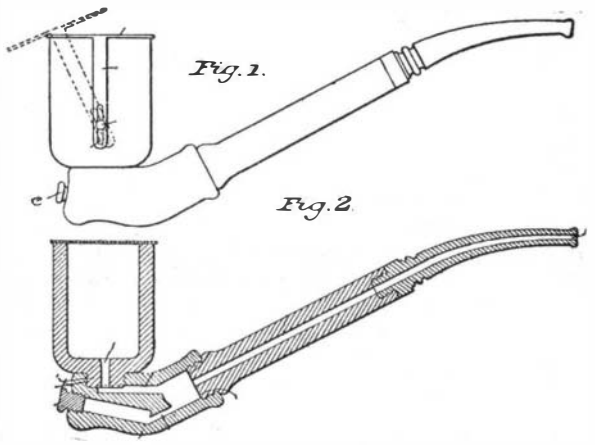
The report of the U. S. Bureau of Statistics gives strong refuting testimony to the assertion that the use of wine promotes temperance by reducing the consumption of stronger liquors. France is pre-eminently the wine-drinking country among the great powers. Of the four whose statistics are given in this report, she alone is becoming more and more addicted to intoxicants. Since 1880 she has far more than doubled her consumption, not only of wine, but of stronger liquors, and is also becoming a large consumer of beer. Her per capita for consumption of ardent spirits was 1·32 gallons; Germany's, 1·14 gallons; Great Britain and Ireland's, 1·01; and America's, 1·24. The same year France consumed 38·88 gallons of wine per capita, against less than half a gallon per capita for the other nations.—*U. Signal.*

Second Hand Corks.

These corks, says a correspondent of the *Analyst*, after lying for weeks around in bar rooms, covered with bad smelling and fermenting vegetations, are sold to dealers who subject them to a kind of bleaching process, run them through a smoothing machine, and sell them to bottlers, weiss beer brewers and others, for use again. A cork may be never so well cleaned, but the internal fissures in it always retain some of the vegetations referred to, and communicate its ravaging properties to the liquids they are used to preserve. Such uses should be prohibited.

AN IMPROVED PIPE FOR TOBACCO SMOKERS.

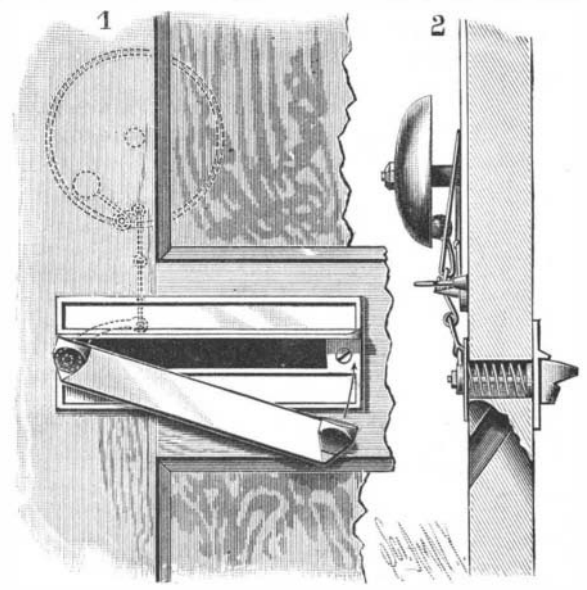
The construction of the pipe herewith illustrated will be readily understood from the two views given. It has been patented by Mr. Fred Roesling, of 394 North Perry Street, Cleveland, Ohio. It is designed so that the moisture chamber may be cleansed without removing the stem, and to prevent the moisture from re-entering the bowl or passing up the stem to the smoker's mouth, while the bowl, chamber, stem, and mouthpiece may be separately cleansed when desired. The cover of the bowl has downwardly extending slotted arms, which engage pins fixed to opposite sides of the pipe, whereby the cover may be readily removed and replaced.



ROESLING'S TOBACCO PIPE.

AN IMPROVED DOOR PLATE AND BELL PULL.

The illustration herewith represents a simple form of combined door plate, bell pull, and mail receiver which has been patented by Mr. Michael A. McGlinn, of No. 122 Charlotte Street, Lancaster, Pa. The plate, which is designed to receive a name or number, is adapted to cover the mail-receiving aperture in the door, and at the same time to be used as a means for operating the door bell. This plate has at one end a stud which extends through the door, so that pressing down the plate at the other end of this stud will operate a door bell, the picture showing an ordinary double stroke bell, such as are in common use. Around this stud is a spiral spring that is under continual strain, and tends to keep the cover or name plate over the aperture, and in contact with a ledge over it, which is provided to prevent the entrance of rain or dust. The cover plate, when pushed down, is brought back to place again, when released, by the spring, and thus rings the bell.



McGLINN'S DOOR PLATE, BELL PULL, AND MAIL RECEIVER.

THE first iron boat is thought to have been built in 1777, on the river Foss, in Yorkshire. It was fifteen feet long, and made of sheet iron.