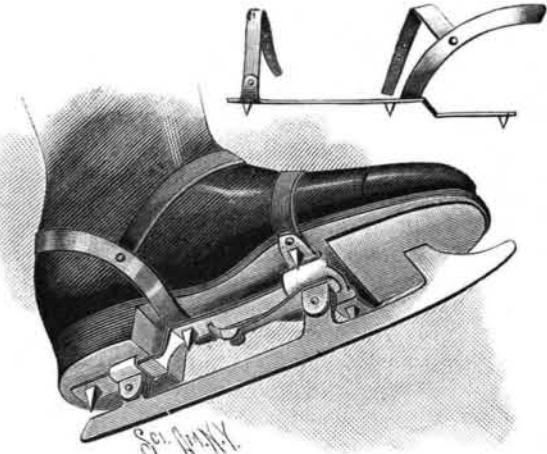


A CONVERTIBLE ICE CREEPER AND SKATE.

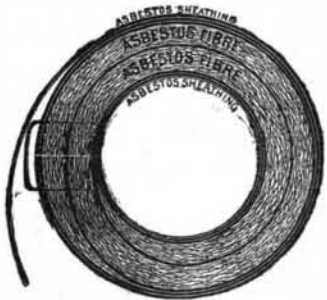
A combined ice creeper and skate, adapted for attachment to boots, shoes, or rubbers, and in which the skate may be applied to the foot without removing the creeper, has been patented by Mr. Richard C. Abbott, of East Blue Hill, Me., and is illustrated herewith. The creeper has a sole-bearing strip or plate, with lateral extensions having upward projections, each provided with buckles and eyes for attachment of the creeper to the shoe, etc. The sole-bearing plate has a downward offset for the better rest of the treading face of the heel, spurs being placed upon the lower surface

**ABBOTT'S CONVERTIBLE ICE CREEPER AND SKATE.**

of the creeper as desired. The skate blade is adapted to be engaged with the creeper by being provided with horizontal lateral extensions, having ear pieces arranged to lie under and against the extensions of the creeper. A spring plate on the skate blade is also adapted for engagement with the creeper, making a firm attachment, the whole constituting a device calculated to be particularly advantageous to ice harvesters and others.

NON-CONDUCTING PIPE COVERINGS.

The Chalmers-Spence Company, of New York, has for many years been engaged in the manufacture of asbestos packings, sheathings, and other fireproof goods, their standard non-conducting coverings for steam and hot air pipes and for boilers, etc., being pretty well known. The illustrations herewith represent a new Patent Removable Covering made by the company, styled class "C," made by a special and improved process of manufacture. It is formed entirely of pure asbestos fiber, in cylindrical sections of three feet length, of the exact size of the pipe to be covered. The asbestos fibers are so interlaced that the sections are both strong and flexible, affording so large a number of air cells as to give this covering the very highest non-conducting quality, while it cannot char or be in any way injured if exposed to the most intense heat from without or within. The Fire Felt Sectional Covering for boilers

**PIPE COVERING.**

and large surfaces made by the company is identical in construction with the class "C" covering, but is made in sheets, in convenient form to be readily applied. In connection with these coverings, the company also supply a Superator Jacket, which is both fire and water proof. It is made of a flexible sheet of asbestos, strengthened by wire netting, the asbestos being waterproofed by a special process. This jacket is provided with patent lacings, by which the covering can be easily and most effectively secured in place and readily removed when required without any cutting or loss of material. These Coverings and the Superator Jacket have been subjected to the most thorough tests by United States navy engineers, and receive their warm commendation. One of the illustrations represents the application of this Superator Jacket. A

cheaper substitute is afforded by the canvas jacket, which may be sewed or pasted on.

The company also manufacture a full line of asbestos goods. Their general office and factory is at 8th Street and the East River, New York City, with branches in all the principal cities of the country.

The Influence of Moderate Drinking on Health.

Under the title of "The Influence of 'nipping' upon Health," Dr. Harley, the English hepatologist and nephrologist, discusses, in the January number of the *Provincial Medical Journal*, the injurious effects of drinking alcoholic beverages "in moderation." He says that the majority of men are moderate drinkers, and, as a consequence, most of one's patients belong to this class. Dr. Harley is right in stating that the effects of alcohol taken in excess are universally known to physicians. But his other statement, that very little has been written on the consequences of drinking in moderation, can only be accepted in the qualified sense of "comparatively little." Be this as it may, the figures published by him, as taken from the registrar-general's report, are certainly rather staggering. Comparing the mortality tables of men exposed to the temptation of frequent "nipping" with those of men not similarly exposed, the result is "startling in the extreme, more particularly as regards the proportion of liver diseases." For it would appear that the rate of mortality is six times greater among those whose business is practically inseparable from "nipping," than among those representing all the other industries combined.

It appears further that, after the liver, the kidneys, the heart, and the nervous system become most frequently affected in moderate imbibers. Dr. Harley says that "it is not difficult to understand why the liver, of all organs in the body, should be the most affected by 'nipping,' when it is remembered that almost every drop of alcohol taken into the stomach is absorbed by the branches of the portal veins, is conveyed directly to the liver, and has to filter through its tissues ere it can get into the general circulation, and by it become distributed to the other organs of the body." He also showed, so long ago as 1853, that the mere injection of alcohol into the portal vein in dogs is sufficient to disorder the hepatic functions to such an extent as to cause the animals to become diabetic in the short space of from two to three hours.

That the kidneys suffer less than the liver is probably due to the fact that less alcohol reaches them than the former. Nevertheless, alcohol is, in part, eliminated through those emunctories, and Harley claims to have obtained "pure alcohol" from the kidneys of persons who have died intoxicated, by the simple process of distillation.

According to the author, "the only tangible reasons, however, that we as yet possess for alcohol disordering the renal function exist (1) in the fact of its elimination causing extra work, and (2) that alcohol increases the renal circulation, just as it increases the circulation elsewhere, and no doubt at the same time causes a corresponding increase in the diameter of the renal blood vessels by engorgement, and consequent pressure on the inter-vascular tissues."

As regards the bad effect of "nipping" upon the heart, it consists in inviting disease in the predisposed, as well as in augmenting disease which already exists.

Finally, with regard to the nervous system, Dr. Harley believes that alcohol taken in small quantities at a time, but frequently repeated, acts deleteriously by keeping the blood vessels on the stretch, by engorging them, and causing them to press upon the nerve cells and fibrils. This interferes both with the proper performance of their functions and with nutrition.

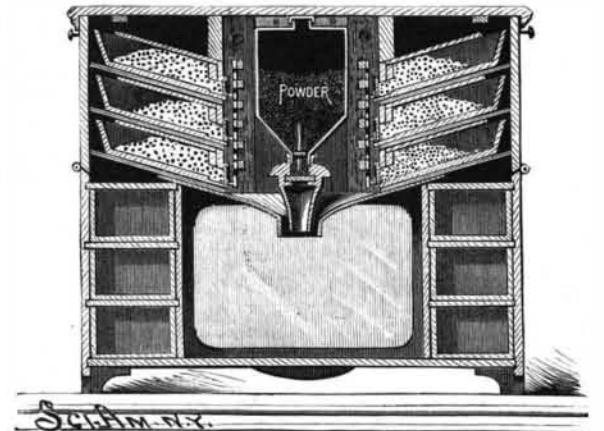
The nerves also suffer indirectly through the action of alcohol on the blood. For Harley has found that, even in the small proportion of five per cent, alcohol "exerts a powerful chemical effect on blood, so powerful as to entirely derange one of its most important functions—namely, the function of respiration. The alcohol seems to act like an asphyxiant, inasmuch as it not alone diminishes the power of the red corpuscles to absorb oxygen, but to exhale carbonic acid, and that, too, in the same way (though to a somewhat less extent) as morphia does.

This peculiar chemical action of the alcohol on the blood nerve pabulum may be thought to give a reasonable explanation of the paralyzing action of alcohol upon the nervous system, seeing that oxidation is the motor power of all vital action, and in direct proportion to its activity are the manifestations of

life accelerated or retarded. Every breath we draw, every movement we perform, every thought we think, is but the outcome of the transformation of matter under the influence of oxygen. If, then, it be true, as above shown, that alcohol possesses the power of preventing the constituents of the blood from being properly oxidized, and thereby fitted for the purposes of nutrition, it is easy to account for its producing a chain of neurotic symptoms terminating in coma and death."—*Medical Record*.

AN IMPROVED AMMUNITION CASE.

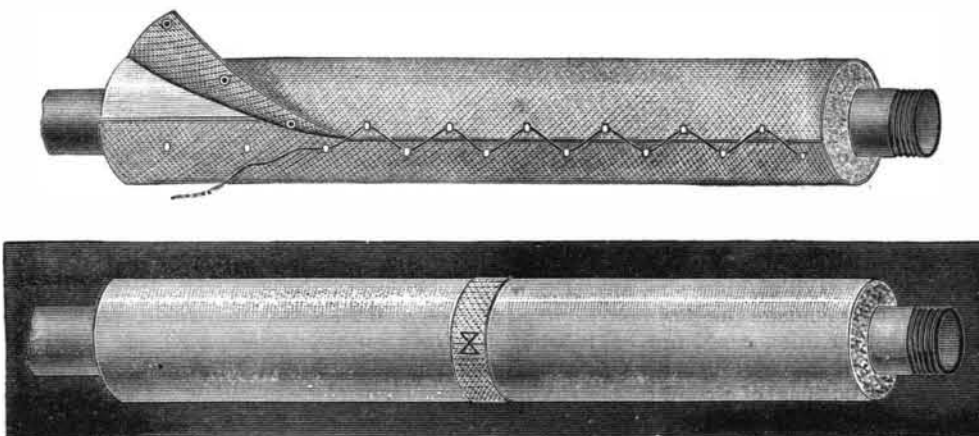
A case particularly designed to set on counters by storekeepers and others, for keeping powder, shot, and

**SECTION SHOWING INTERIOR ARRANGEMENT.****FREMAUX'S AMMUNITION CASE.**

gun materials for retailing, has been patented by Mr. Edward C. Fremaux, of Mermenton, La., and is illustrated herewith. The space allowed for the scales in the case is open at the side next the storekeeper, but at its opposite side is closed by a glass plate, that the customer may see the weighing operation, while there will be no danger from sparks of cigars, etc. The central powder receptacle has a hinged top, to give ready access thereto for refilling or removing, and in its lower hopper-shaped portion is a valve, operated by a spring pull knob in the front of the case, allowing the passage of powder through a spout to the scoop of the weighing scales. A finger agitator is so connected with the valve as to be vibrated by the pulling of the knob, thus preventing the caking or choking up of the powder at the valve outlet. The inclined shot trays at the sides have discharging apertures, the opening of which is effected by spring pull rods, whereby shot may be delivered from each compartment of the tray, through the central hopper or chute to the weighing scales. The construction is such as to give ample strength for the shot trays and drawers for holding various gun supplies, as caps, primers, cartridges, etc., while affording convenient access to each compartment.

Improvement of Forests.

Senator Hale lately introduced a bill prepared by the American Forestry Congress to preserve the forests, which is outlined as follows: "It withdraws from entry as forest lands all public lands of the United States more valuable for their timber than for agricultural purposes. It institutes the office of commissioner of forests, and authorizes the appointment of four assistant commissioners. The commissioner is instructed to form the forest land into what are designated as forest reserves. He is given power to frame rules and regulations for the government of these reserves, and to appoint rangers to see that the rules are observed. No forest lands are to be sold, but the stumpage on them may be disposed of in the discretion of the commissioner of forests." The *New York Times* urges the replanting of land denuded of merchantable timber, and believes that by a wise arrangement the state might derive a large revenue from its mature timber and the thinning of the new plantings, and realize an annual sum equal to that for which some of the lands have been sold.

**PURE ASBESTOS REMOVABLE PIPE COVERING.**