

## SCIENTIFIC MUSEUM.

## Remedy for Yellow Fever.

We have seen it stated in a number of our exchanges that a remedy for yellow fever has been discovered at Angostura, Venezuela.—The remedy is the plant vervain or verbena, which grows abundantly in that region.—The expressed juice of the leaves given in small doses three times a day, with an enema of the same every two hours, is stated to be a perfect cure for the yellow fever and black vomit, even in their most threatening stages. All the physicians of Angostura have adopted this treatment of the disease, and they state that hardly any deaths occur under its influence. This information is furnished by Mr. Mathison, the British Vice-Consul at the above place.

The varieties of the verbena growing in the warm and temperate regions of the Western world are numerous. The particular species referred to above, is that known to botanists by the name of "verbena jamaicensis." It is a native of the West India Islands, as well as of the continent. There are two kinds of it, the male and the female; the latter is the one used as above. It has long been known to the creole population of Spanish America for its medicinal virtues. They have used it as a febrifuge and an unfailing specific in cases of dysentery. It is generally given to children as a tea, mixed with sugar and milk, and is by no means a disagreeable beverage. The expressed juice of the plant forms a cooling purge for children in fevers. The vervain is likewise a remedy of particular note in sundry maladies that defy ordinary medicines. Sloane says it is a powerful deobstruent; according to Barham, it is likewise an excellent vermifuge. And, having now been discovered as a cure for yellow fever, the shrub must in future rank as a still more valuable addition to the pharmacopœia.

## Materials for Milk Pans.

According to the experiments of M. Hinuber, of Moisburg, Germany, one hundred Hanover quarts of milk yielded, in tinned milk-pans, 7.07 Hanover lbs. of butter; Glass, 7.04 Wooden (not painted), 6.96; Earthenware, 6.92; Wooden (painted), 6.67. According to the same experiments, there required for one of milk; produced by stall-feeding with tare and clover, 15.67 quarts; by pasturing, 11.84 showing that the milk obtained from cattle fed upon pastures is richer in butter than milk got from cows which have been fed in the stable with one and the same kind of plants: even a mixture of tare and clover shows an increase over clover alone.—[Polytec. Jour.]

[By the above, tinned milk pans are the best for cooling milk and obtaining cream. In some dairies, however, all the milk is churned, and we should suppose that this was the best way to obtain all the butter in the milk. There is no butter in the tin, therefore, we suspect, that one vessel is just as good as another, if clean, in which to churn the milk.

## Bed Clothes.

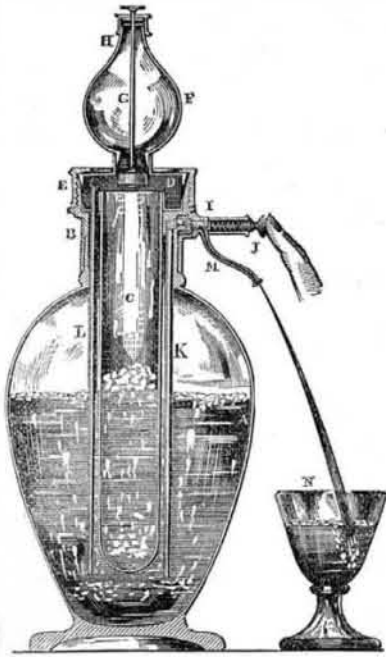
The perfection of dress, for day or night, where warmth is the purpose, is that which confines around the body sufficient of its own warmth, while it allows escape to the exhalations of the skin. Where the body is allowed to bathe protractedly in its own vapors we must expect an unhealthy effect upon the skin. Where there is too little ventilating escape, insensible perspiration is checked, and something analogous to fever supervenes. Foul tongue, ill taste, and lack of morning appetite betray the evil.

## Percussion Caps Superseded.

A new composition has lately been invented by Messrs. Winiwarter and Gersheim, of Vienna, for the purpose of superseding the ordinary percussion caps, and, in many instances, the gunpowder charge also. The most prominent feature of these gun primers, as the composition is called, are the absence of a metallic coat or cover, and their uniform explosive power, the materials being of such a nature that, after a detonation, no residue whatever is left behind. The materials which form the new composition are fulminating

mercury, chlorate of potash, and sulphide of antimony, the dangerous properties of which ingredients are diminished by the application of collodion, which is used as a cement, and it is the ingenious employment of this substance which constitutes the chief peculiarity of the invention.

Aerated Water Apparatus.



This is an aerated water apparatus, introduced by Messrs. Gaillard & Dubois, of Paris. The main features of this arrangement consist in the employment of three distinct chambers, or receptacles, one being for the water to be aerated, a second to contain the effervescing powders, and a third to retain a small quantity of pure water, which, after the apparatus is closed, is allowed to fall upon the powders, thereby causing the evolution of the carbonic acid gas. This figure represents one modification of this ingenious apparatus. The water, or other liquid to be aerated, is contained in a glass bottle, A, of elegant shape, and formed with a wide cylindrical neck, to which a metal collar piece, B, is cemented. This collar is bored out to receive the long cylindrical vessel, C, like a chemical test tube in shape, supported by a metal collar, B, is bored out conically, to receive a conical lid, D, which is screwed down by the cap-piece, E, the joint being rendered hermetic by the introduction of a ring of leather or caoutchouc, between the conical surfaces. The lid, D, has a central opening, into which is cemented the small glass vessel, F, resembling a hollow stopper from its shape and position. It is fitted with a conical plug, the spindle, G, of which passes through a small stuffing box at the top, and has a button attached outside. The stuffing employed is a disc or washer of leather or caoutchouc, which is compressed by the screw-cap, H. Into one side of the collar, B, is screwed a species of siphon cock, I, consisting of a plug valve, opened by the pressure of the finger on the external button, J, and closed by the action of a helical spring. The passage of this valve communicates with a tube, K, of small bore, reaching nearly to the bottom of the vessel, A. On the opposite side is another similar tube, L, descending to a like depth, and terminating above in a small rose, and in communication with the vessel, C, in which the gas is evolved. The manner of proceeding in using this apparatus is as follows:—The cap, E, is unscrewed, and the three vessels are separated, when the largest, A, is filled to nearly seven-eighths of its capacity with the liquid to be aerated. The bicarbonate of soda and tartaric acid, or other powders for producing the gas, are now put into the tubular vessel, C, which is then put into its place in the vessel, A. The vessel, G, is next filled with pure water, and the plug being tightly closed, it is placed in position, and the whole screwed together again. When it is wished to set the matters in action, the plug spindle G, is depressed, and the water descends upon the effervescing powders, and the gas evolved in consequence finds its way by the tube, L, to the water below, impregnating it and pass-

ing through it, so as to exert a pressure on its surface, which, when the cock, I, is open, forces it up through the tube, K, and out by the spout, M, into the glass, N, placed to receive it.

## New Way of Checking Railway Baggage.

The following method of checking baggage has recently been adopted with great satisfaction on two or three of the English railways:—When a train, say a down train, arrives at any particular station, a porter attends with a book. It contains tickets of stiff card board bound in the book. Each ticket is about three inches long and one inch wide. It is partly cut. So that two separate parts of it can be easily torn off. The tickets are numbered differently, but each of the three parts of a ticket has the same number. The outer part of the ticket has a loop of tape gummed to it. Suppose a person arrives at a station and is not going on by a train for an hour or two, or a day, and is desirous of leaving a carpet-bag or a trunk at the station. He pays one penny, and in a moment the taped portion of a platform ticket is fastened to the handle of the carpet-bag. This portion bears, as has been already stated, a printed number also; the words "deposited at Winchester," or whatever the station may be, and likewise the words, "for down train." Another portion of the ticket, with the same number as the last, is torn off and given to the owner of the carpet-bag, to be presented at the station when the article is wanted. The words "for down train" is omitted on this portion. The portion of the ticket that is left in the book corresponds with that given to the passenger, and is a check on the money-taker. The company then becomes responsible for the safety of the property. Luggage is divided into three classes—that for down train, up train, and to be left till called for, and should be sorted into three different compartments at the station.—For each division there is a separate book of tickets. If a person were to find or steal a ticket, and apply for property, he would be instantly detected, because he would first have to say whether the luggage was for up or down train, or to be left till called for which he could not do unless he owned it.—There is no necessity for any address to be on the luggage. One penny per package per diem is charged for a platform ticket.

A BILL IS NOW BEFORE THE HOUSE OF COMMONS, for regulating the hours of factory labor, by preventing the running of machinery after certain hours. The hours of factory labor in England are much shorter than those in our country. Children under ten years are not allowed to labor, and those under 13 years are provided with educational means by their employers. The operatives in these factories are not so well paid as those in America, but their hours of labor are less by 12 per week.

## Hot Weather.

On Friday last week the heat was so great in our city, that no less than 50 persons were sun struck. During the week we understand that about 200 persons lost their lives with the heat; they were nearly all foreigners, and mostly natives of Ireland. For thirty years no such excessively hot weather has visited our city. No less than 100 deaths by heat occurred last Sunday.

## LITERARY NOTICES.

THE ENGINEER AND MACHINIST'S DRAWING BOOK—Blackie & Son, 101 Fulton street, New York City. This work claims to combine the excellencies of the best French treatises upon mechanical drawing; it is not, however, a translation. The Drawing Book is based mainly upon the work of M. Le Blanc, whose method and illustrations are followed; but the English editor has incorporated the useful matter of other standard treatises, and also added much original matter. The work is systematic and progressive; it commences with a description of drawing instruments and materials, and a preparatory series of exercises, which make the student familiar with the principles of geometry required. In proper order all the difficulties and mysteries of Mechanical Drawing are to be elucidated. Plain and practical instructions are given for representing the most complicated machinery. The illustrations on wood and steel are numerous and beautiful. We find nothing about the work to blame. It promises to become the best book upon the subject. To be completed in 14 parts; Nos. 1, 2, 3, and 4 are issued. Price 50 cents each.

BIBLICAL REPERTORY AND PRINCETON REVIEW—This able Theological Quarterly, for July, published at 265 Chesnut street, Philadelphia, but edited by Dr. Charles Hodge, D. D., of Princeton, N. J., contains four leading articles on different subjects of religious interest, and a fifth contains the proceedings of the late General Assembly of the Old School Presbyterian denomination, which was held at Philadelphia. These proceedings are of great interest.

THE NEW ENGLANDER—F. W. Northrop, New Haven, Ct.—The August number of this well known magazine and review is worthy of its high reputation. The articles are chiefly on matters of interest at the present time; we would commend to notice, particularly, the article on Layard's Discoveries.

HOUSEHOLD WORDS—A journal conducted by Charles Dickens: American edition published by McClrath & Barker, 17 Spruce street, N. Y. This publication has a circulation in Great Britain of about 90,000, and is gaining a strong hold in this country. Dickens, as a writer of prolific genius stands acknowledged before the world: human nature in all its phases he understands, and with wonderful facility he turns it into effective interest to his host of admirers. Terms \$2 per annum. Monthly Parts, 25 cents.

MECHANICS, INVENTORS,  
AND  
MANUFACTURERS.

## SPLENDID PRIZES!

The first number of the NINTH VOLUME of the SCIENTIFIC AMERICAN will be issued on the 17th of September. We are grateful for the very liberal encouragement which we have received from our readers, and take this occasion to express to them our gratitude. We are also under many obligations to our cotemporaries for favorable notices.

The next volume will be commenced with new and beautiful type, printed on paper manufactured expressly for this publication, of greatly increased weight and finer quality: this item alone will increase our yearly expenses over \$3000; in addition to this we shall increase our present able Editorial force as it is our intention to continue the Scientific American, "THE LEADING AND MOST RELIABLE PRACTICAL SCIENTIFIC JOURNAL IN THE UNITED STATES." It will continue the unflinching advocate of all useful improvements, and it will fearlessly expose all unreliable and deceptive schemes appertaining to its character; [in this respect it has gained a reputation superior to any other work of the kind in the world.]

The opening of the CRYSTAL PALACE in this city forms an object of rare public interest; we shall devote a full page of the paper every week to careful criticisms, reviews, and illustrations of the objects most worthy of attention. We hope to render this department especially interesting to all our readers, whether they visit the Fair or not. The copious and FINELY EXECUTED ENGRAVINGS of Machinery, New Inventions, etc.—the FOUR HUNDRED PAGES of valuable Scientific and Practical Reading—the USEFUL RECEIPTS—the full Report of all the PATENT CLAIMS, and the reliable character of the journal on all branches within its field of labor—render it worthy of the support which it has so liberally received from its intelligent class of readers.

The circulation of the Scientific American during THOUSAND COPIES PER WEEK. The edition on the new volume will be commenced with twenty-three thousand, which we feel confident will not be an over calculation. Subscribers, to ensure the numbers from the commencement of the volume, should send in their subscriptions early, as many were disappointed in not obtaining the complete set of the present volume.

The Scientific American is in form SUITABLE FOR BINDING, and each volume is accompanied with a full Index of all the subjects, which renders it an ENCYCLOPEDIA OF USEFUL, SCIENTIFIC, and MECHANICAL INFORMATION, for present as well as future reference.

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