SCIENTIFIC MUSEUM.

Preservation of the Eyes.

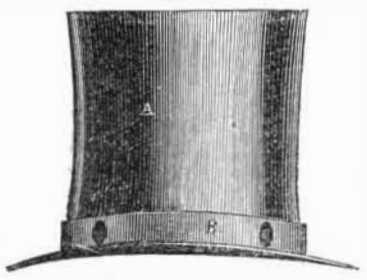
There is an old tradition that the eyes are strengthened, and the vision preserved in old age, by rubbing the closed eye-lids frequently with the finger in a horizontal direction. About three years ago there was considerable excitement in this city, by persons professing to cure weakness of vision, yea, even restoring faded sight, by manipulating the eye-balls. The New York "Scalpel" treats such pretensions as delusive, and asserts that such treatment as mechanical manipulation, for the eyes, is positively injurious. It cites some cases where great injury resulted to those who submitted to rubbing of the eyes for the cure of faded sight, and instances a case of a man who lost his sight forever by some one—a friend—who thoughtlessly came behind him and closed his eyes firmly with his hands, calling upon him to guess who it was—a not uncommon custom among thoughtless young people. The eye is so very tender—is such a fine piece of mechanism, that it must be handled and treated with great care and gentleness. Many become short sighted at an early age, constitutionally or by sickness, or by imposing too much labor upon those wonderful organs. In health the eyes will undergo much fatigue, but they are as capable of being over-taxed as the arms, or the limbs. Much reading or writing, by artificial light, is very trying to the eyes, especially if the light is unsteady, too brilliant, or too weak. A good full light, shaded with a light blue globe, is the best to read or write with during evening hours. Upon no consideration should a man read more than four hours at once, by artificial light, and he should give his eyes ten minutes' rest after he has read two hours; this is the experience we have gathered from not a few persons. Those who are blessed with strong eyes should not over-tax them, as many zealous students do, by too much night study, or as some merchants do, by too much night writing. There are instances on record of a sudden loss of sight by strong men, who had read and written by lamp-light, as if their eyes never would fail, and their vision never lose its power. The celebrated Euler lost his eye-sight by an imprudent night's study, in some of his mathematical calculations. The smoke of lamps is very hurtful to the eyes, hence a good circulation of air is as necessary for the eyes as for the lungs. The "Scalpel" asserts that it is injurious to wash the eyes by dipping the face in a basin and opening the eyes in the water, and recommends cold tea or milk and water, for bathing the eyes in preference to water itself. A very weak solution of the sulphate of zinc is excellent for blood-shot or surface-inflamed eyes; we have never known it to fail in effecting a cure in a few days.

Lightning from the Earth---Houses Struck.

On the 19th ult., during a severe thunder storm, the house of Sterling Armstrong, in Newark, N. J., was struck with lightning, although it had a lightning rod. Some person went and examined the house afterwards, and published a letter in the "Newark Advertiser," asserting that the lightning which struck the house *came* out *of* the ground. This he judged from the course of the lightning and its effects. From the description which he gave of the effects of this flash of lightning, no evidence was presented that would have led us to conclude that it came out of the ground; we do not believe that a single house ever was struck with lightning from the ground. Since the time the account was first published of this house being struck, E. Merriam, of Brooklyn, who has given great attention to such subjects, has visited it and made a careful examination of the course of the lightning and its effects. He has formed a very different opinion from that of the other person who believed that the house was struck with lightning from the ground. He describes how the lightning came from the clouds, and minutely points out its course, and the reason why it was so struck while it had a lightning rod. This rod was made of good iron, and was of a proper thickness, but its points were painted with white paint, and so was the whole rod excepting that part on the roof of the house. This was bare; the lightning passed from the upper line of the unpainted part until it came to the paint, then passed off to nails in the shingles, and from them descended through the house. He asserts that he never saw a painted rod perform the duties of a conductor. Here then we have evidence and an opinion that Faraday is wrong in respect to the *solid section* of the rod; the surface and not the solid section, according to Mr. Merriam, is the grand desideratum. Nay, this goes to prove that lightning is conducted on the surface only; for if this were not so, the current spoken of would not have left this rod when it came to the paint, but have passed down through it, as through the covered wires of the telegraph.—There appears to be a discrepancy here, upon which light is required to be shed.

New Ventilating Hat.

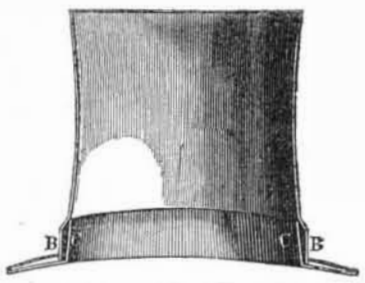
FIG. 1



The annexed engravings are views of a new hat recently registered in the London Patent Office, by a Liverpool hat company named Flanagan. Figure 1 is a vertical elevation, and figure 2 is a vertical section.

The object of this hat is to fit it more comfortably to the head by forming a soft rim in it where the head enters. The body, A, of the hat, is the same as it has been, except that it is made with an external air channel, B, standing up a short distance above the rim.—The mouth of the hat is therefore made a little wider than those in common use, and the channel, B, answers as a receptacle for air to act as an elastic cushion. This recess may contain granulated cork or air alone. It is covered tight on the inner side by a flexible band, C, which is glued to the body of the hat with an opening left for the external air. An encircling air chamber is thus formed to embrace the head, and make an easy, pleasant fit. All that appears externally, is the band-like projection which contains the elastic fitting piece.

FIG. 2.



Two years ago, when Kossuth came here with a felt beaver, the rage for such head pieces, with little feathers in them, was notorious; we welcomed the felt hat, but not the feather. Since then the old hard shell has come into vogue again, and we all wear our little pots on the top of our heads once more. With few exceptions, the black silk hat is the only one in general use. It is not a good hat, but a positively bad one. It is hard and uncomfortable, and is perfectly air tight; it therefore does not allow the vapors of the head to pass off; it is the cause of headaches and baldness on this very account. The silk hat has a felt body; this is saturated with lac varnish, and a black silk plush cover (by steaming and ironing) is cemented on it.—How can it then be comfortable, and how can it be anything but injurious to the health of the head by long use? This illustrated hat provides for the comfort of the person who wears it, and we hope that our hatters will either adopt this or some other mode of improving their silk hats for the comfort and benefit of their customers. We are well aware that people—men and women—will, if they can, live up to the fashion, whatever that be, either high heeled, uncomfortable boots, tight laced corsets, or *hard shell* hats.—We do not care what the fashion may be, if it does not sacrifice comfort, good taste, and common sense. For these reasons we want all the fashionable hats hereafter to be made with comfortable mouth pieces and some ventilating arrangement all for the benefit of poor humanity.

Events of the Week.

AMERICAN INGENUITY REWARDED.—The Calcutta "Englishman," of June 16, contains the award of the committee, who have been there three years at work testing different varieties of cotton gins, dividing the prize of 5,000 rupees between two Massachusetts Yankees, Messrs. Bates, Hyde & Co., and Messrs. Carver & Co. That sum is to be sent to Washington for the parties entitled to it, with gold medals of the Agricultural Society of India for each of them. The society further voted to purchase the two machines at the cost price of construction.

NEW SCIENTIFIC INSTITUTION.—On the second Monday of next month (September) a new collegiate institution will be opened near Port Gibson, Mississippi, E. N. Elliott, L. L. D. being President and Professor of Natural Science. The course of study will embrace the whole range of the sciences, such as practical mathematics, mechanical philosophy, surveying, engineering, chemistry, &c. Students will be received at any grade of proficiency, and the charges for tuition, room rent, board and washing, will be only $200 per annum. Here is a fine opportunity presented to many of the sons of our southern readers. They will be under the charge of competent, moral teachers and guardians.—The name of the college is the "Southern Scientific Institution."

Feeding Horses.

Having two horses to feed I tried the two following methods:—First, I took a grist to the mill, consisting of half corn and half oats for feed. Counting the toll at the mill, waste, and loss of time, it cost one-seventh of the grist. I save all this now by soaking the feed in water for about two hours, with just about as much as will cover it, which makes it greatly increase in bulk, and the horses thrive just as well on it as on ground feed.

C. J. D.

New Guano Island.

A statement has been published to the effect that a large supply of guano has been found on an island in the Indian Ocean, between Mauritius and Calcutta, and that some of the samples sent to England are of a superior quality. The island is stated to be twenty miles long and seven broad, and covered in every part. Should the expectations thus raised be fulfilled, it will be a serious matter for Peru, and a happy thing for our farmers, as the price of guano will no doubt be reduced thereby.

Precious Stones.

The "Alta California" states that specimens of beryl, and topaz of remarkable value and beauty, consisting of emerald, both stones of the first water, have been found on Tuolumne river, and the present high price of this gem, being next in value to the diamond, will warrant extensive exploration in search of them.

The contents of the Egyptian galleries of the Louvre, at Paris, have just been re-arranged, and a portion of the interesting discoveries made by M. Mariette, some time ago, in the Temple at Memphis (found under ground), has been added to them.

An unknown comet has just paid us a visit. It is a small one, and makes another of those mysterious heavanly wonders which puzzle and confound the reasoning of astronomers.

Lieut. Maury recently lectured in Liverpool and explained his Wind and Current charts. He was highly complimented for his discoveries, scientific information, and modesty.

LITERARY NOTICES.

THE SCALPEL—We have received the August number of this able monthly journal of health, edited by Dr. E. H. Dixon, New York: it contains several very valuable papers on the structure and functions of the nerves, is an elaborate and ably written article worthy of careful perusal.

Parts 9 and 10 of J. Payne Collier's edition of Shakspeare's Works, embracing several very important emendations, are received. This valuable and only true version of Shakspeare, is issued by J. S. Redfield, at 25 cts. per number: 16 parts complete the work.

MEYER'S UNIVERSUM—Vol. X, Parts 1 and 2.

UNITED STATES ILLUSTRATED—Vol. 1, Parts 1 and 2. These popular illustrated serials are published by Herman J. Meyer, 164 William st, New York.