

SCIENTIFIC MISCELLANY.

When We See Colors—A Mammal That Stings—Epidemics from Other Worlds—Artificial Immunity from Disease—Protection by Telephone Wires—A Remarkable Abrasive Material—Curious Habits of Brazilian Amphibians.

If "seeing is believing," one must often accept some very contradictory evidence. In some experiments reported by Herr H. W. Vogel to the Berlin Physical Society, objects were illuminated by oil lamps, provided with screens of pure red, green and blue colors. When white light was rigidly excluded, all sense of color disappeared, only shades of black and white being distinguishable. A scale of colors under red light showed the red pigments as white or gray, which abruptly turned into yellow—a color not contained in either of the sources—on adding blue light. Red and yellow patches then appeared of the same color, but the difference was brought out on substituting green light for the blue. That the brightness of objects has much effect on color—disproving the idea that a definite color sensation in normal eyes—was shown in a region of the spectrum near the G line of Fraunhofer's scale, where the color is violet when the luminosity is feeble, blue when it is stronger, and may even appear bluish white in strong sunlight. Herr Vogel concludes that our estimate of color is guided by our perception of the absence of certain constituents, red, for instance being recognized only when we perceive its inability to reflect other rays.

The duck mole of Australia, which Sidney Smith declared made Sir Joseph Banks miserable from his utter inability to decide whether it was a bird or a beast, is a mammal with webbed feet and a duck's bill, and is remarkable for laying eggs like a bird or reptile. It was long thought harmless and without defense. Dr. A. Stuart has lately found, however, that a powerful spur of the male's hind leg, apparently connected with a gland, may inflict a hornet-like sting, which is sometimes fatal to dogs.

Since Homer's time vast falls of organic particles, as well as of meteoric dust, have been known at various times and places. Dr. T. S. Blair, of Harrisburg, argues that the organic matter may have largely come from space, and that showers of still-living germs may explain the sudden appearance and rapid spread of many historic epidemics.

In the literature accessible, Maiselis last year found recorded 505 cases of second attacks of small-pox, and 9 of third attacks; 29 of second attacks of scarlet fever, and 4 of third; 26 of second attacks of measles, and 1 of third; 292 of second attacks of typhoid fever, and 5 of third; and 29 of second attacks of cholera, and 3 of third. Only 3 cases of fourth attacks—1 of typhoid fever and 2 of cholera—were discovered. Sternberg, in a recent paper to Biological Society of Washington, noted that while the protection afforded by a single attack against a second is in a considerable number of infectious diseases generally permanent, it is in other diseases more or less temporary, and it varies not only with the disease but with the individual, the family, and the race. In some diseases—such as pneumonia, influenza and Asiatic cholera—it is difficult to determine from clinical experience whether a first attack exerts any protection, but experiments on the lower animals make it probable that a certain degree of immunity is afforded in all infections due to bacterial parasites. In the malarial fevers, which are due to a parasite of a different class a first attack, on the contrary, rather predisposes to a subsequent one. The principle factor in the production of acquired immunity is now believed to be the introduction into the blood of some substance capable of neutralizing the toxic products of the particular pathogenic organism to be resisted, or of destroying the germ itself. Our knowledge of the antitoxins—which do not as a rule have a germicidal action, and otherwise differ from the alexins, to which natural immunity is ascribed—dates from 1890, when it was discovered that the blood of an animal immune from anthrax contains some substance neutralizing the anthrax bacillus, and that the pathogenic power of virulent bacilli of diphtheria and tetanus may be similarly neutralized by the blood of animals immune from these diseases. Since then the existence of other antitoxins—such as those of tuberculosis, rabies, typhoid fever, and boils—has been demonstrated. In 1891 Ehrlich experimented with powerful toxalbumins—vegetable poisons differing from those of bacteria—and found that by subcutaneous injections of dilute solutions animals could be made to bear a dose of

200 or 300 times that ordinarily fatal, immunity against one poison, however, having no effect against another of the same class. It was also proven in 1887 and confirmed in 1894 that animals may acquire a certain immunity from snake venom.

Results of a German inquiry prove that overhead wires tend to reduce the violence of thunderstorms and lessen the danger from lightning. Cases of damage from lightning were about five times as numerous in places without telephone systems as in those having them.

Extraordinary results have been reported from trials of a new stone-cutting material called "Krusbite." The substance consists of tiny metal shot, ranging from mere powder to cloverseed size, which have been chilled to intense hardness—but without producing brittleness. The material is substituted for sand—requiring no change of machinery—for sawing granite and other stone, and is said to be capable of doing the work of diamond saws at a tenth of the expense. It is also effectively used in sand blast apparatus, and in place of diamond drills for boring and drilling. A ton of it has been found to equal 300 tons of sand for sawing and polishing. It does its work by crushing projecting parts over which it rolls, and it does not—like sand, emery or corundum—become partially imbedded in the blade or rubber. A great reduction in labor and driving power, as well as in wear and tear, is claimed.

The tree frogs about Rio Janerio have interesting breeding habits, states The Independent. Hyla faber constructs nests of mud on the shallow border of ponds, wherein the young are protected from enemies while in the larval state. In another species (H. gouldii) the metamorphoses are rapidly passed through in the embryo state, the eggs being carried on the mother's back. In a third species (H. nebulosa) the frog deposits her eggs in a slimy mass attached to withered banana leaves, the young remaining in this rude nest until fitted to breathe the air directly.

Pietro's discovery that liquors may be artificially aged by cold is about to be applied commercially in a proposed frigorific laboratory in Paris. The liquor is gradually cooled to 200 C below zero, then gradually brought again to the ordinary temperature.

About 4,000,000,000 particles of dust, Dr. Alkin estimates, are added to the air by every puff of a cigarette smoker.

An important discovery by M. Pfister, an Austrian engineer, is that seawater may be freed from salt and rendered potable by forcing through a tree-trunk.

Jamaica is pointed out as the land of ferns, its species numbering between 400 and 500.

Monazite Mining in Burke

Already the monazite industry in the county is proving a great benefit to many of the citizens of Burke, especially those living in the southern and western portions of the county. Peter Buff, of the South Mountains, brought to town a quantity of the precious ore last week, and realized about seventy-five dollars in cash. He disbursed in town twenty-five dollars for supplies, and carried home fifty dollars to further push the work. Others are also making a success at the business. These hills and valleys that have hitherto been considered worthless, when developed are proving more than equal to our richest bottom.—Morganton Populist.

Beware of Ointments for Catarrh That Contain Mercury.

as mercury will surely destroy the sense of smell and completely derange the whole system when entering it through the mucous surfaces. Such articles should never be used except on prescriptions from reputable physicians, as the damage they will do is ten fold to the good you can possibly derive from them. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, O., contains no mercury, and is taken internally, acting directly upon the blood and mucous surfaces of the system. In buying Hall's Catarrh Cure be sure you get the genuine. It is taken internally, and made in Toledo, Ohio, by F. J. Cheney & Co. Testimonials free. Sold by all druggists, price 75c. per bottle.

The State Supreme Court has recently changed the law course prescribed for applicants for license to practice, and the Statesville Mascot says "the heart and core has been cut out of the course, to-wit: Blackstone's commentaries." "The principle of the law," it adds, "as defined by Blackstone cannot be supplied by other works." The Mascot understands that Judge Clark was the chief mover in the reform and that Judge Furches opposed it.—Charlotte Observer.

I recommend Chamberlain's Pain Balm for rheumatism, lame back, sprains and swellings. There is no better liniment made. I have sold over 100 bottles of it this year and all were pleased who used it. J. P. Pierson, druggist, South Chicago, Ill. It is for sale by O. M. Royster.

GOV. KNOTT ON SILVER.

In His Usual Vein of Convincing Humorous Argument He Defies Ajax Carlisle.

Several weeks ago ex-Governor Proctor Knott, of Kentucky, wrote a private letter to Senator Blackburn concerning the currency question, then being considered by the senate. The letter was not intended for publication, but Senator Blackburn, being impressed with the force of Governor Knott's arguments, gave it to the press. Among other features of the letter was the following paragraph written in Governor Knott's characteristic style:

"I do not know when my democracy has been more completely outraged than by the last insolent demand of the goldites that the government shall issue \$50,000,000 in gold bonds and retire the treasury note circulation with the proceeds. They don't seem to want to leave us even a hereafter. You know, as every body else must who has half as much sense as a sneaking guinea pig, that whenever this government agrees to pay that amount, or a title of it, in gold, silver is doomed, so far as we are concerned, to all eternity. As old Judge Forbush said to Johnnie Moore, it had 'jest as well say goodby world and howdy hell.' Great God! How rapidly this long suffering people are being driven to the dreadful alternative of slavery or interminable strife—to determine whether they will tamely hold out their hands and have the shackles of a remorseless plutocracy riveted upon their wrists or fight. Now, mark what I say: If the inexorable law of cause and effect has not been expunged from the statute book of the Almighty, unless a halt is called, p. d. q., you may expect to see the horrors of the French revolution put on the American stage with all the modern improvements, and that within the next decade."

The publication of this letter immediately raised a great howl among the once-holders and the patronage press of Kentucky. Secretary Carlisle also announced that if it became necessary he proposed to go to Kentucky to defend the attitude of the administration on the currency question.

In a long letter to The Louisville Courier-Journal, ex Governor Knott, writing from his home in Danville, Ky., discusses the currency question in a most interesting manner and defends every line of his letter to Senator Blackburn.

By way of reference to the criticism of the patronage press and the cuckoos, the governor issues the following highly interesting challenge to Secretary Carlisle, who it will be seen is not having smooth sailing in his own state.

Governor Knott says: "I shall be more than compensated for all the unfriendly criticism it has brought upon me if it should turn out to be true, as stated by the Washington correspondent of The Courier-Journal, that it has provoked a determination in our distinguished secretary of the treasury to stomp the state in defense of the 'financial policy of the administration,' for if there is anything in the history of the human family since the fall of the primeval pair which stands more in need of defense I have never heard of it.

"That eminent financier seems, however, to be laboring under a misapprehension which it is, perhaps, my duty to correct. If the correspondent to whom I have just referred has represented him truly, he regards my letter as a direct attack upon himself by those Kentucky democrats who do not favor his financial views." If he insists on considering it in the light of an 'attack,' I beg to assure him that I am in this instance the sole attacking party. While I am thoroughly satisfied that an overwhelming majority of the democrats of Kentucky, who so long delighted to do him honor, differ from his recent 'financial views'—as I do myself ab ovo usque ad mala—not another soul on earth knew of, or is in any wise responsible for a syllable I wrote. I wish to say moreover that it things have come to the pass that a private citizen can not express an opinion different from that of a federal official, however eminent he may be, without being deemed to be in the charge of 'attacking' that functionary, I wish to 'plead guilty' now. I have 'attacked' the honorable secretary repeatedly, and expect to do so again whenever and wherever my duty may require it, for I do not dissent from his recent 'financial views' minutely, and unqualifiedly, and expect to do so until I am convinced that the time-honored doctrines of the democratic party upon that subject, which I have heard him so ably defend in times gone by, are not more rot—the contemptible drivell of a party of misceles, or a false misrepresentation deliberately designed to deceive the people.

A Cotton Fertilizer.

Purchase only such fertilizers for cotton which contain at least 3 to 4% actual potash. For Corn, Fertilizers should contain 6% Potash. Poor results are due entirely to deficiency of Potash.

We will gladly send you our pamphlets on the Use of Potash. They are sent free. It will cost you nothing to read them, and they will save you dollars. GERMAN KALI WORKS, 93 Nassau Street, New York.

"But I trust he will adhere to his resolution to stomp Kentucky during the coming campaign." He may rest assured that his wish will be gratified; that the fight will be an open one. Kentucky democrats make no other kind. He must have forgotten their mode of warfare during his long absence from their midst if he supposes they fight from ambush. They are anxious to see him again. They have repeatedly regretted that they were compelled to rely on others to battle for their principles in other contests, and that they were even abandoned to all the horrors of the present constitution, because he was so deeply engrossed in the investigation of great political questions which could be explored on this side of the Alleghenies. It is hoped, therefore, that he will not disappoint them now. They are hungering and thirsting after information upon many points in financial history for the past two years which he is pre-eminently qualified to give them. They may not ask him, perhaps, to recite that memorable passage which rang out like a trumpet call to the cohorts of 'free silver' in his speech of February 21, 1878, but they will no doubt expect him to reconcile it with his present 'financial views.' I need not, however, enumerate the topics he will probably be asked to discuss. He will doubtless have plenty to talk about. Nor will he lack an audience. Crowds will gather with drums beating and banners waving, perhaps. "When Johnnie comes marching home," but in their midst he will find thousands of sturdy old democrats who still believe that the principles so often promulgated by their party are not a mere 'delusion and a snare,' who have not yet learned to bow the knee to Baal, nor kiss the feet of the Golden calf; who are still true to the faith delivered by the fathers, and who will not be at all terrified by his coming. They have long since learned that 'there were brave men before Agamemnon.'"

Order for Fourteen Locomotives. RICHMOND, Va., March 30.—The Richmond Locomotive Works received today an order from the Southern Railway Company for fourteen locomotives—eight freight and six passenger.

CLINTON A. CILLEY ATTORNEY AT LAW, HICKORY N. C.

Practices in the courts of this and adjoining counties, also in the Federal courts. nich 81y

W. H. MARLOW Is still working at the old stand where he will be pleased to give you prices on TIN ROOFING AND GUTTERING of all kinds. Give me a trial. I will give you low prices and first-class work. WORK GUARANTEED! If you want any work in TIN, SHEET IRON, ZINC, ETC., get my prices. I will save you money. All kinds of Produce taken in exchange for work. Call on me, or address at NEWTON, N. C.

H. C. DENNY City Barber (Shop moved to Main Street Ground Floor) HICKORY, N. CAROLINA

The best work and lowest prices. Most handsome compartments and superb equipments. Give him a call.

Wanted: 1000... (Advertisement for a business opportunity or product, partially obscured)

NOTICE. I WANT every man and woman in the United States interested in the Opium and Whisky habits to have one of my books on these diseases. Address B. M. Woolley, Atlanta, Ga. Box 382, and one will be sent you free.

Chamberlain's Eye and Skin Ointment Is a certain cure for Chronic Sore Eyes, Granulated Eye Lids, Sore Nipples, Piles, Eczema, Tetter, Salt Rheum and Scald Head, 25 cents per box. For sale by druggists.

TO HORSE OWNERS. For putting a horse in a fine healthy condition try Dr. Cady's Condition Powders. They tone up the system, aid digestion, cure loss of appetite, relieve constipation, correct kidney disorders and destroy worms, giving new life to an old or over worked horse. 25 cents per package. For sale by druggists.

OF COURSE YOU WANT THE BEST

OF COURSE YOU WANT THE CHEAPEST.

Well, When You Want THE BEST GRADE

—or— Job Printing

—AT— LOWEST PRICES.

Send us your order—it perhaps will save you money, and we guarantee to furnish you as FINE WORK as is done anywhere. Call and see samples, or send us your orders by mail. This is no idle tale—we mean what we say—we will furnish you

THE BEST WORK —AT— THE LOWEST PRICES.

Address HICKORY PRINTING CO. Hickory, N. C.

In Poor Health

means so much more than you imagine—serious and fatal diseases result from trifling ailments neglected. Don't play with Nature's greatest gift—health.

Brown's Iron Bitters

It Cures Dyspepsia, Kidney and Liver, Neuralgia, Troubles, Constipation, Bad Blood, Malaria, Nervous ailments, Women's complaints.

Judge Shepherd has formed a partnership with Messrs. Manning and Foushee, at Durham, for the practice of law. Judge Shepherd will continue his residence in Raleigh, going to Durham only when the legal affairs of the firm require his presence.

FREY'S VERMIFUGE. The old-fashioned and always reliable remedy for stomach disorders. One bottle has killed 614 worms. Thousands of people living to-day owe their life to this medicine. The same good medicine FOR CHILDREN. (Small illustration of a child)