

SCIENTIFIC AND SANITARY.

THE St. Lawrence River is the only absolutely floodless river in the world. Its greatest variation, caused by drought or rain, never exceeds a foot.—*Chicago News.*

PROFESSOR NOTHNAGEL, the Austrian court physician, traces the grip back to the ninth century, and says it recurs with varying intensity for three or four years, and then dies out for twenty or more years. He knows no remedy.—*New York Press.*

THE planets Jupiter and Venus are evening stars throughout January. During the month they approach each other, and on the 5th of February they will be in conjunction. At this time they will be very near each other, the distance being only a minute. During January the other planets, Mercury, Mars, Saturn and Uranus, are to be seen in the evening, the last two in the constellation Virgo, and Mars in Libra during the first part of the month and in Scorpion during the latter.

THE island of Madagascar has two distinct climates, two classes of natives and two classes of fauna and flora. The island is about the size of France. Along the coast it is tropical and malarious, and the natives are darker and larger than in the interior. The interior is a high table land and mountainous. There the climate is cooler and the natives smaller and lighter in colour than on the coast. But in the interior they are more intelligent and they rule the island.—*Pittsburg Dispatch.*

THE complaint is much less heard now than it was formerly, but still it is sometimes heard that the electric light is injurious to the eye. Most people have learned that it is just as easy to save the eyes from the electric light by the exercise of a little common sense, as it is to injure them by the neglect of it. For perfect illumination there is no necessity for the actual source of light to be visible. It may be diffused by means either of frosted lamps, dioptric shades or silk shades. The light will be much more pleasing, and the loss in light will be found to be much less than is usually supposed. A properly illuminated room is one in which the light is evenly distributed, and no irritation is caused by the source of it being too apparent. Electrical engineers are beginning to recognize that the diffusion of light is an art in itself.—*Pittsburg Dispatch.*

"August Flower"

How does he feel?—He feels blue, a deep, dark, unfading, dyed-in-the-wool, eternal blue, and he makes everybody feel the same way—**August Flower the Remedy.**

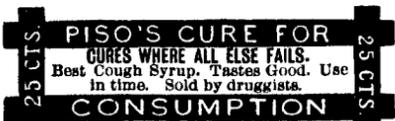
How does he feel?—He feels a headache, generally dull and constant, but sometimes excruciating—**August Flower the Remedy.**

How does he feel?—He feels a violent hiccoughing or jumping of the stomach after a meal, raising bitter-tasting matter or what he has eaten or drunk—**August Flower the Remedy.**

How does he feel?—He feels the gradual decay of vital power; he feels miserable, melancholy, hopeless, and longs for death and peace—**August Flower the Remedy.**

How does he feel?—He feels so full after eating a meal that he can hardly walk—**August Flower the Remedy.**

G. G. GREEN, Sole Manufacturer,
Woodbury, New Jersey, U. S. A.



Minard's Liniment relieves Neuralgia.

THE following is a statement showing nationality of the immigrants to New York during 1890. Germany heads the catalogue with 77,138 passengers. America itself is second, with 60,000 native citizens returning from their European trip on pleasure, health, or business. The third in point of numbers are the Italians, who reached a total of 59,154; the fourth are the subjects of the Hapsburg Monarchy—Austria-Hungary—who numbered 57,122; the fifth are the English, 45,087; the sixth are the Irish, 38,568; the seventh, the Russians, 32,256; the eighth, the Swedes, 25,095; the ninth, the Poles, 17,409; the tenth, the Scotch, 10,391; the eleventh, the Norwegians, 9,975; the twelfth, the Danes, 8,735; the thirteenth, the Switzers, 7,144; the fourteenth, the French, 7,082. The Dutch, who once were more at home there than any other Europeans, sent only 4,325 last year, and their old competitors, the Spaniards, only 835, about a hundred less than the Portuguese. Australia sent 45, and China 26.

A SCOTCHMAN has invented an ingenious and useful addition to the clock for the purpose of warning its owner that the time of an engagement has arrived. At the top of the clock is a disk or drum in which are forty-eight slots representing the hours and quarters of the day, the whole arrangement being driven by the clock so as to make a complete revolution in twelve hours. Tablets of ivory, one and a-half inches long by three-quarters of an inch wide, fit into the slots of the disk. To use the device, the engagement is written on a tablet which is placed in the slot representing the hour and fraction at which the engagement is to be fulfilled. The moment the time arrives the tablet drops automatically into a box in front of the clock, while an alarm bell rings sixteen times to call attention to the tablet. As there are forty-eight slots, it is possible to make the clock warn for an engagement every fifteen minutes. The device will, it is said, become popular with business men who have subordinates with short memories, while to ensure the proper administration of medicine, at stated intervals, the apparatus will find a useful place.—*Philadelphia Record.*

It is known that ozone can be abundantly produced by the electric silent discharge, and many years ago Siemens devised an "ozone-tube" for the purpose, consisting of two thin glass tubes, one within the other; the inner lined, and the outer coated, with metal, to which alternating currents of high tension are brought, acting on the gas to be ozonized within. From recent experiments in Siemens and Halske's laboratory, says *Nature*, it appears that a good result may be had with only one dielectric, and for this not only glass, but mica, celluloid, porcelain, or the like, may be used. Thus the ozone-tube may be arranged with a metallic tube within, and the outer tube a metal-coated dielectric; or the inner metal tube may have a dielectric coat, while a metal tube is the enclosing body. As metals that are little or not at all attacked by ozone, platinum, tin, tinned metals, and aluminium are recommended. Through the inner tube flows cold water, and through the space between the tubes air, dried and freed from carbonic acid. Several such tubes may be combined in a system, and worked with alternate currents (for single tubes the continuous current with commutator is best). An apparatus of this kind is now at work in the laboratory, yielding 2.4 mg. of ozone per second. Experiments are being made in supplying compressed ozone for technical use; and this has been accomplished with a pressure of nine atmospheres. One use of ozone, on which Herr Frölich lays special stress (in the recent lecture from which these data are taken), is the disinfection and sterilization of water. And doubtless with an abundant supply of the substance, the use of it will be greatly extended.—*Science.*

DRS. EMMERICH AND MASTRAUM have published an interesting article in a German Hygienic journal on the cause of immunity from infectious diseases and their treatment, especially of swine erysipelas, and a new method of protective vaccination for it. Emmerich, according to the *Lancet*, published in the year 1886 his doctrine that the cause of immunity from infectious diseases is a modification of the chemical process going

on in the cells, so that the new chemical compounds formed act as microbe killers without doing any harm to the cells themselves. In consequence of the results of a series of experiments, Emmerich concluded that this antibacterial poison acts destructively on all the microbes within a few hours after their introduction into the organism. The publication of this doctrine having met with a good deal of opposition, he repeated his experiments, and again arrived at the same result, showing that the explanation of immunity from infectious diseases proposed in 1886 was justified. Granted the correctness of this, it follows that extracts from the tissue of any animal enjoying immunity are remedies against the corresponding infectious disease. Further experiments are now reported by Drs. Emmerich and Mastrau, which show that an extract from the various tissues and the blood of rabbits, which have been made proof against swine erysipelas, is an excellent remedy for the disease, and that a hypodermic injection of the extract can serve as a rational protective inoculation. A rabbit was inoculated by having injected into the posterior auricular vein the fifth of a cubic centimetre of a fresh broth culture of swine erysipelas, diluted with fifty times its volume of distilled water. In the course of the following week or two a series of hypodermic injections of the same liquid was administered. For the purpose of preparing a liquid extract suitable for therapeutic or prophylactic purposes, the organs of the rabbit were cut up and submitted to a pressure of from 300 to 400 atmospheres, and the expressed juice filtered into sterilized bottles. A large number of white mice as well as rabbits were now inoculated with the swine erysipelas, and at the same time, or very shortly afterwards, an injection of the liquid extract was administered to some of them. These remained alive, while all the others—that is to say, those which had not received an injection of the liquid extract of the organs of the infected rabbit—succumbed. Other experiments were carried out by which it was shown that this same liquid is capable of conferring immunity from the disease. Further experiments were made which showed that the bacilli were destroyed in six hours, and that in eight hours all were dead, or at least incapable of multiplication, but that the liquid extract produced extremely little effect upon the same bacilli outside the organism, so that the presence of living cells is evidently necessary for the destructive effect of the liquid extract to manifest itself. Another interesting result obtained was that bacilli taken fresh from the body were very much more active than their cultures in broth.—*Science.*

"LISTED," as the brokers say, at "100 Doses One Dollar," Hood's Sarsaparilla is always a fair equivalent for the price.

THE delicate mechanism of the stomach contains, according to a physiologist's discovery, fully 5,000,000 minute glands that are constantly secreting gastric juice.

DOES PROTECTION PROTECT?—Certainly, in one instance, it does. Hood's Sarsaparilla is the great protection against the dangers of impure blood, and it will cure or prevent all diseases of this class. It has well won its name of the best blood purifier by its many remarkable cures.

THE highest praise has been won by Hood's Pills for their easy yet efficient action. Sold by all druggists. Price 25 cents per box.

C. C. RICHARDS & Co.

Gents,—I certify that MINARD'S LINIMENT cured my daughter of a severe and what appeared to be a fatal attack of diphtheria after all other remedies had failed, and recommend it to all who may be afflicted with that terrible disease.

JOHN D. BOUTILLIER.

French Village, Jan., 1883.

DR. T. A. SLOCUM'S

OXYGENIZED EMULSION OF PURE COD LIVER OIL. If you have Difficulty in Breathing—Use it. For sale by all druggists. 35 cents per bottle.

Minard's Liniment Cures Burns, etc.

Dyspepsia

Intense Suffering for 8 years—Restored to Perfect Health

Few people have suffered more severely from dyspepsia than Mr. E. A. McMahon, a well-known grocer of Staunton, Va. He says: "Before 1878 I was in excellent health, weighing over 200 pounds. In that year an ailment developed into acute dyspepsia, and soon I was reduced to 162 pounds, suffering burning sensations in the stomach, palpitation of the heart,

Nausea and Indigestion

I could not sleep, lost all heart in my work, had fits of melancholia and for days at a time I would have welcomed death. I became morose, sullen and irritable, and for eight years life was a burden. I tried many physicians and many remedies. One day a workman employed by me suggested that I take Hood's Sarsaparilla, as it had cured his wife of dyspepsia. I did so, and before taking the whole of a bottle I began to

Feel Like a New Man.

The terrible pains to which I had been subjected, ceased, the palpitation of the heart subsided, my stomach became easier, nausea disappeared, and my entire system began to tone up. With returning strength came activity of mind and body. Before the fifth bottle was taken I had regained my former weight and condition. I am to-day well and I ascribe it to taking Hood's Sarsaparilla."

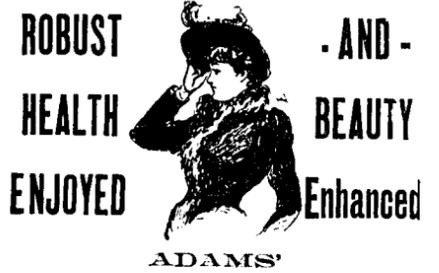
I Congratulate

"Myself that I used Hood's Sarsaparilla. Six months ago I had almost a chronic case of dyspepsia. I was also broken down by overwork, so that I could not sleep nights. My stomach is now perfect, my nerves in excellent shape and I gained 10 pounds in six months. For all this my gratitude is due

Hood's Sarsaparilla

the best medicine in the land." B. H. Rose, of Rose & Eddy, Hardware Dealers, Rochester, N. Y.

Hood's Pills cure liver ills. Price 25c.



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DUNN'S FRUIT SALINE makes a delicious Cooling Beverage, especially Cleanses the throat, preventing disease. It imparts Freshness and Vigour, and is a quick relief for Bloating, Sea-Sickness, etc.

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