

## SCIENTIFIC AND SANITARY.

WORK on the cable which is to connect Florida with the Bahamas will be begun in January. Its length will be about 225 miles.

The most powerful electric lighthouse in Europe is the one at Hanstholm, on the Scow. It has a strength of two million candles.

TORPEDO net-cutting devices are now esteemed so effective that the British Admiralty has ordered much heavier nets for its new war-ships.

A SMOKELESS fuel called "Massute" is being used on steam rollers in Vienna. The fuel is composed of the liquid residuum of petroleum refineries.

AN ocean pier at Puerto-Columbia, near Savanilla, will, when finished, be 4,000 feet long, built entirely of iron and steel, with a double line of rails.

THE cargo ship of the future will in some opinions be a five-masted vessel with auxiliary steam, such as is now building on the Clyde. She will carry 6,000 tons.

TELESCOPIC steel masts are to be used for the electric lamps lighting the public squares in Brussels, Belgium, in order to preserve the beauties of the parks in the daytime.

THE first portable electric light plant sent to Mashonaland, Africa, was hauled from Capetown to Mount Hampton, a distance of nearly 1300 miles, by twenty bullocks. It is to be used for search light purposes.

THE German navy has added another to its sixty seaworthy torpedo boats—the "D. 7." This craft has attained a speed of twenty-six knots. The engines indicate 400 horse-power, and the vessel has a capacity of 350 tons.

THE most approved substance for mounting photographs, and that of the most equal consistence, is the white of an egg. Before mounting dip the photograph in a basin of perfectly clean water, then lay it between a towel or piece of linen, which will absorb the superfluous moisture; place it face downward on a perfectly level and clean surface and work the white of egg with a small sponge on a piece of stick or brush, if the hairs are secured.

## "August Flower"

How does he feel?—He feels cranky, and is constantly experimenting, dieting himself, adopting strange notions, and changing the cooking, the dishes, the hours, and manner of his eating—August Flower the Remedy.

How does he feel?—He feels at times a gnawing, voracious, insatiable appetite, wholly unaccountable, unnatural and unhealthy.—August Flower the Remedy.

How does he feel?—He feels no desire to go to the table and a grumbling, fault-finding, over-nicety about what is set before him when he is there—August Flower the Remedy.

How does he feel?—He feels after a spell of this abnormal appetite an utter abhorrence, loathing, and detestation of food; as if a mouthful would kill him—August Flower the Remedy.

How does he feel?—He has irregular bowels and peculiar stools—August Flower the Remedy. ©

**PISO'S CURE FOR**  
CURES WHERE ALL ELSE FAILS.  
Best Cough Syrup. Tastes Good. Use  
in time. Sold by druggists.  
**CONSUMPTION**

Minard's Liniment relieves Neuralgia.

A GREAT series of sewerage works for the entire city of Marseilles, France, has just been commenced. The cost will be about \$7,000,000.

It is proposed to connect Lake Venern, in Sweden, with the North Sea by a canal fifteen miles long in order to open up rich deposits of iron ore.

ACCORDING to the latest report of the British Board of Trade, thirty-nine sailing vessels in Great Britain are between 50 and 60 years old, eighteen are between 60 and 70 years, thirty are between 70 and 100, and six are actually above a century old.

DR. ELKIN, the astronomer of Yale University, and formerly of the Cape of Good Hope, has, by a long series of observations on the parallel of the star Arcturus, arrived at the conclusion that it moves with the inconceivable velocity of 381 miles a second. This is twenty-one times faster than the speed of the earth in its orbit round the sun.

To cut sheet brass chemically the following method meets with great success. Make a strong solution of bichloride of mercury in alcohol. With a quill pen draw a line across the brass where it is to be cut. Let it dry on, and, with the same pen, draw over this line with nitric acid. The brass may then be broken across like glass cut with a diamond.

It is reported from Augsburg that Dr. Lehner, a chemist, has invented an artificial silk, which will now be manufactured on a large scale. The cost of production of this material, which cannot be distinguished as regards texture from genuine silk, is about a quarter of the cost of natural silk, but the tenacity of the material is only two-thirds of that of the natural product.

AN English railway engineer has invented a useful adjunct to the ordinary semaphore signal, consisting of a whistle operated by compressed air. When the blade is at danger, a spring lever is made to rise so as to lie along the inner side of the rail. This lever projects slightly above the rail, and when depressed by the wheels of a passing engine a piercing screech is omitted by the whistle at the side of the track. This combination of visible and audible signals affords additional assurance of safety.

ONE of the most powerful shears that has ever been built was recently put in place in a steel mill at Newburn, England. This machine will shear an ingot of steel thirty inches wide and twelve inches thick, and do it as easily as a child can cut a stick of candy. The block of steel is carried by rollers to the jaws of the machine, a mighty foot steps on the ingot and holds it firmly in place, and the knife descends and snips off a piece. Hydraulic power does all the work, and it requires only about three seconds to make a cut.

A NEW electrical cell, called the "Gloria" element, that is likely, for certain purposes, to become a substitute for the heavy and inconvenient accumulators, has been invented by a German engineer. The inventor states that a single charge will be sufficient to produce, during sixty hours, a current of comparatively great power, which can be used either for motive power or for electric lighting purposes. According to the maker, Mr. Hubner, of Kolln, near Meissen, four of these elements would supply one or two incandescent lamps of 16 c. p., or would furnish sufficient power for driving a sewing-machine.

SOME Belgian manufacturers of glass and porcelain have recently introduced from Germany a new colouring matter, which can be fixed without the use of fire. In this process a mixture of two solutions, of which one consists of 100 parts of strong potash and 10 parts of acetate of soda, and the other of 15 parts of acetate of lead in 100 parts of water. The second solution consists of 50 parts of borax dissolved in 100 parts of hot water and 20 parts of glycerine. Sixty parts of the first mixture are mixed with 40 parts of the second. When the composition has been applied the objects are placed in a bath, which is composed of 1 part of borax dissolved in 12 parts of water, mixed with 50 parts of hydrofluoric acid and 10 parts of sulphuric acid. After being allowed to remain in the bath for 10 minutes, the objects are washed in clean water, when the colour appears as clearly as when the objects are fired.

THE name of the newest anaesthetic is pental. Its inventor is Professor Von Mering, Director of the Medical Policlinic in Halle. He observed four years ago that tertiary amyl-alcohol produces a soporific effect, and since then it has been in use as a hypnotic. It occurred to him that the amyl corresponding to amyl-alcohol might be fitted for anaesthetic purposes, and this substance has now, after several vain attempts, been obtained. Its chemical composition is (CH<sub>3</sub>)<sub>2</sub>CCHCH<sub>3</sub>, and Mering calls it Pental, owing to the circumstance that it contains five carbon atoms. It is very volatile and easily combustible. It can be administered exactly like chloroform, and the quantity required each time costs about sixpence. Anesthesia sets in after three or four minutes, rarely later. It is not deep, but suffices to render small operations, such as the extraction of teeth painless. It is neither accompanied nor followed by any unpleasant effects.

FOR scrofula in every form Hood's Sarsaparilla is a radical, reliable remedy. It has an unequalled record of cures.

THE new Swiss railway—the Brenzer Rothhornbahn—is the highest in the Alps. It is 7,586 feet at the summit level.

IN THE HOUSE THAT JACK BUILT.—Jack is still alive, although given up by two doctors years ago. Hovering in misery on the grave's brink, constipated and clogged with poisons till yellow as saffron, thus miserable I bought St. Leon Water, drank freely and it saved my life. Jack is now hale and hearty and still using St. Leon, the best drink in the world. Jack Gilroy, Smith's Falls, Ont.

THE project of draining the city and the valley of Mexico has been temporarily abandoned.

"MY DAUGHTER'S LIFE was saved by Hood's Sarsaparilla," says Mr. B. B. Jones of Alna, Maine. "She had seven running sores in different places on her body, but on giving her Hood's Sarsaparilla there was marked improvement and now she is well, strong and healthy."

HOOD'S PILLS cure Constipation by restoring the peristaltic action of the alimentary canal. They are the best family cathartic.

THE EVIL OF SUBSTITUTION.—Do you ever think when buying a patent medicine that you take chances of being imposed upon by mercenary and unscrupulous dealers? If you demand time-tried and stood-the-test medicines you take no chances; if you take a substitute you may be putting poison into your system, that will result in temporary relief and the subsequent wrecking of your health forever. Think it over. Did you ever hear a complaint about Dr. Pierce's Medicines—Pierce's Golden Medical Discovery, for the liver, the blood and the lungs, or Dr. Pierce's Favorite Prescription for weakly women, failing to do just what they are advertised to do? Men who spend millions of dollars in advertising a remedy that is a benefaction to humanity, do not take these chances when there is not a sterling force, a great remedy back of their advertisements. Dr. Pierce's remedies are guaranteed to give "value received or no pay," and the *Journal* is doing you a kindness, and not seeking to advertise Dr. Pierce, when it calls your attention to the reliability of such standard medicines.—La Salle and Peru (Ill.) *Twin City Journal*.

DR. T. A. SLOCUM'S

OXYGENIZED EMULSION OF PURE COD LIVER OIL. If you have any Throat Trouble—Use it. For sale by all druggists. 35 cents per bottle.

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. BOCTILLIER.  
French Village, Jan., 1883.

A HERB is said to have been discovered in Yucatan which is a specific for insanity.

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.

ROBUST - AND -  
HEALTH - BEAUTY  
ENJOYED - Enhanced



ADAMS'

## TUTTI FRUTTI GUM

RECOMMENDED BY THE  
HIGHEST MEDICAL AUTHORITIES.

AIDS DIGESTION,  
INVIGORATES THE SYSTEM,  
STRENGTHENS THE VOICE,  
IMPROVES THE APPETITE.

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Address—

The Tutti Frutti A. V. Co., 60 Yonge St.,  
Toronto, Ont., for Box of assorted samples, which  
will be sent by mail to any address on receipt of  
25 Cents.



If with your friends you've been dining,  
And get home so late in the night,  
"DUNN'S FRUIT SALINE" in the morning  
Will make you forget you were

**DUNN'S  
FRUIT  
SALINE**

**DUNN'S  
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SALINE**

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 Bilioousness, Sea-Sickness, etc.

BY ALL CHEMISTS.