

## SCIENTIFIC AND SANITARY.

THE friends of the typhoid fever patient will not fail to remember and be grateful to the physician for his care and skill in treating the patient, but would have thought him intrusive and troublesome had he taken one-half the same trouble to see that the cause of the fever was prevented.—*The Builder*.

DR. GRIFFIN, Brantford, Ont., medical health officer, estimates that there have been two hundred cases of measles there during the past two months. Overcrowding in the schools is given as the cause. Typhoid fever also has been very prevalent in Brantford, from eighty to a hundred cases occurring every year. Bad water from river pollution is doubtless the cause.—*Canada Health Journal*.

OF the Peroxide of Hydrogen, Dr. Dickey, in the *Annals of Gynecology and Pædiatry*, says: I know of nothing in the whole materia medica that will dissolve the diphtheritic membrane so quickly and thoroughly, and yet leave the healthy mucous membrane intact. We have in it a remedy of the greatest value in combating this dangerous malady. None will destroy the false membrane and bacilli more speedily and with greater certainty.

FEW people can form a definite idea of what is involved in the expression: "An inch of rain." It may aid such to follow this curious calculation: An acre is equal to 6,272,640 square inches; an inch deep of water on this area will be as many cubic inches of water, which, at 227 to the gallon, is 22,000 gallons. This immense quantity of water will weigh 220,000 pounds, or 100 tons. One-hundredth of an inch (0.01) alone is equal to one ton of water to the acre.

WE are at work just now, said a manufacturer the other day, on some pretty small wire. It is 1-500th of an inch in diameter—finer than the hair on your head, a great deal. Ordinary fine wire is drawn through steel plates; but that wouldn't do for this kind of work, because if the hole wore away ever so little it would make the wire larger, and that would spoil the job. Instead, it is drawn through what is practically a hole in a diamond, to which there is, of course, no wear. These diamond plates are made by a woman in New York, who has a monopoly of the art in this country. The wire is then run through machinery which winds it spirally with a layer of silk thread that is .0015 of an inch in thickness—even finer than the wire, you see. This wire is used in making the receiving instruments of ocean cables, the galvanometers used in testing cables and measuring insulation of covered wires.

## "German Syrup"

WE have selected two or three lines from letters freshly received from parents who have given German Syrup to their children in the emergencies of Croup. You will credit these, because they come from good, substantial people, happy in finding what so many families lack—a medicine containing no evil drug, which mother can administer with confidence to the little ones in their most critical hours, safe and sure that it will carry them through.

ED. L. WILLITS, of Alma, Neb. I give it to my children when troubled with Croup and never saw any preparation act like it. It is simply miraculous.

Mrs. JAS. W. KIRK, Daughters' College, Harrodsburg, Ky. I have depended upon it in attacks of Croup with my little daughter, and find it an invaluable remedy.

Fully one-half of our customers are mothers who use Boschee's German Syrup among their children. A medicine to be successful with the little folks must be a treatment for the sudden and terrible foes of childhood, whooping cough, croup, diphtheria and the dangerous inflammations of delicate throats and lungs. ☉

It is stated on the best authority that the electric railway between Stockwell and the city, London, England, affects the earth-currents registered at Greenwich Observatory, although the nearest earth-plate is about two and a-half miles from the railway, which, it should be remembered, is encased in an iron tube covered with cement.—*English Mechanic*.

THE type-writer has hitherto been supposed to be an English invention, subsequently developed by the Americans; but a patent has been discovered in the French archives which gives the credit of originating the idea to a Frenchman, M. Pogrin, of Marseilles, who devised and illustrated his apparatus as far back as 1833. "With a little practice," says the author, "one can write as rapidly with the ktypographic pen as with the ordinary pen. I have called it the ktypographic machine or pen, because it prints by striking. It will give birth to a new art." The latest development of the invention is a type-writer for the blind.—*English Mechanic*.

THE STARCH OF PLANTS.—It is generally believed that after the fall of leaves the reserve tissues of ligneous plants remain filled with starch until spring, the epoch at which this substance emigrates in order to serve in the evolution of buds, in the development of the root and the formation of a new layer of wood. The hibernal period is consequently considered that in which the amylaceous reserve is most abundant. It results from the researches of Mr. Emile Mer that such is not the case, and that in the vegetation of ligneous plants there occur two acts that up to the present have passed unperceived—one, a resorption of starch at the end of autumn, and the other a genesis at the beginning of spring, each of them having a duration of from six weeks to two months. It hence follows that winter, far from being the season during which the amylaceous reserve is the greatest, is precisely that in which it is the least.

COMMON thyme, which was recommended in whooping cough three or four years ago by Dr. S. B. Johnson, is regarded by Dr. Neovius, who writes a paper on the subject in a Finnish medical journal, as almost worthy the title of a specific. During an epidemic of whooping cough he had ample opportunities of observing its effects, and he came to the conclusion that if it is given early and constantly it invariably cuts short the disease in a fortnight, the symptoms generally vanishing in two or three days. They are, he finds, liable to return if the thyme is not regularly taken for at least two weeks. Regarding the dose, he advises that a larger quantity than Dr. Johnson prescribed be taken. He gives from one ounce and a-half to six ounces per diem combined with a little marshmallow syrup. He never saw an undesirable effect produced, except slight diarrhoea. It is important that the drug should be used quiet fresh.—*Lancet*.

THE late Sir W. Siemens tried the effect of the electric light in the cultivation of plants by night, but a Russian agriculturist, M. Spechnoff, is reported to have made a trial of seeds which he electrified for two minutes by means of a current, and repeated the operation ten times upon peas, beans, rye, etc., and found that, generally, the electrification of seeds nearly doubled the rapidity of their growth. He then tried to electrify the earth. He took large plates of zinc and copper, 72 centimetres (28 inches) high, and 45 centimetres (18 inches) wide, which were sunk deep into the ground at the extremity of flat iron bars, and joined them above the ground by an iron wire. The effect of this continuous current is stated to have been prodigious upon vegetables. A radish grew 44 centimetres (17.3 inches) in length, with a diameter of 14 centimetres (5½ inches), and a carrot 27 centimetres (10.6 inches) in diameter weighed 3 kilogrammes (6.6 lbs.); nor did this excess in size detract from their good quality. The harvest was in all four times superior to the ordinary for roots, and two or three times for plants.—*English Mechanic*.

AN exchange suggests the use of electricity as a motive power for propelling ocean steamers. This idea is by no means as chimerical as might be imagined. The marvellous advances that have been made in the electrical world in the last decade furnish abundant reason for believing that

the uses to which this subtle force may be and will be applied have only begun to be discovered. It would be nothing unexpected should a method be discovered for utilizing it as a power in ocean navigation. The great difficulty in modern war cruisers is the inability to secure sufficient coal capacity together with the lines of model essential to the highest speed. The *Charleston* has just furnished the country with a striking illustration of this. She burns 175 tons of coal per day when running at full speed and her storage capacity is only 800 tons. As a result she could only run a little over four days in her chase of the *Itata* without securing a fresh supply of fuel. Of course naval authorities fully realize the disadvantages of this condition of things but it is hard to see how it can be avoided, unless, as has been suggested, a way be found to make use of electricity as the propelling power.—*Kennebec Journal*.

THE mischief wrought by damp beds unfortunately does not usually react upon its heedless originators. The sole sufferer is the luckless occupant, who, forgetful of the buyer's caveat and all that it implies, buries himself within the chill of the half-dried bedclothes. In a recent instance, in which the law was appealed to, the tables were turned. The plaintiff, who, with his family, had for several days occupied a room in a seaside restaurant, was then told that the apartment was let, and he must accept another. Here the trouble began. Illness, with its expenses, followed, and the final cost incurred in consequence by his too unceremonious host amounted to £150. An action so unusual and a verdict so consonant with sanitary principles deserve to be kept in remembrance. It is to be hoped that their obvious teaching will not be forgotten by any who live by housing their fellow men. As regards the latter, however, the maxim which inculcates prevention is still the best. Not even a money fine will always atone for the injury done by avoidable illness. *Caveat emptor*, therefore, notwithstanding. Let the traveller, however weary and inclined to sleep, first be careful that his bed is dry. In any case of doubt the use of an efficient warming-pan, or, if needful, even a change of bedding, should be insisted on, and the further precaution of sleeping between blankets rather than sheets is in such cases only rational.—*Lancet*.

THE report of the United States Board of Rapid Transit Commissioners, who have recently had under consideration the subject of providing the best means of rapid communication in New York, has been issued. The Commissioners recommend that an underground electric railway be constructed through the west side of the city. The plans for this new rapid transit system are not yet completed, but it is to consist of a four-track road built mainly in tunnels under the streets, but partly on viaducts where it is necessary to cross depressions in the upper portion of the city. In Broadway, between the South Ferry and Forty-second Street, the tunnel is either to have the four tracks on a level, or is to be double-decked, with two tracks upon each deck, but in any case it is to be so far below the surface as not to endanger the foundations of buildings, or to interfere with sewers, pipe lines and other subways. It will thus escape the objections which killed the Arcade railway scheme which was proposed several years ago. Above Forty-second Street the line is to consist of four tracks upon a level as near the surface as possible, when in tunnel, but not in open cut at any point. The Commissioners have been compelled by the enormous expense involved in securing right of way to abandon the idea of any system of viaducts or open cuts.

THE declining powers of old age may be wonderfully recuperated and sustained by the daily use of Hood's Sarsaparilla.

MEN and women—young and old—will find health anew by the use of Dr. Williams' Pink Pills, an unfailing blood builder and nerve tonic. Cures suppressions, bearing down pains, nervousness, general debility, and all forms of weakness. No other remedy equals them. All dealers, or sent post paid on receipt of price (50c. a box). Dr. Williams Med Co., Brockville, Ont.

MESSRS. James and George Thomson, Glasgow, have modelled a new steamer guaranteed to steam at the rate of 23½ knots an hour, which will enable the vessel to cross the Atlantic within five days. The vessel is to be about 630 ft. long by 70 ft. beam. The lines are very fine. The new vessel will have twin screws 22 ft. or 23 ft. in diameter, well supported. There are four funnels, and about 200 ft. of the length of the ship is left for the boilers and bunkers. The engines are to be triple compound, with four cylinders working four cranks. They will probably indicate 33,000 indicated horse power. Accommodation is provided for 700 first-class and 300 second-class passengers and about 400 emigrants, and all the arrangements worked out in the plans are far ahead, as far as regards luxury and comfort, of anything yet produced. The plating of the ship is carried up to the promenade deck, which runs from end to end, and width of about 20 ft. on each side is left for walking. On the promenade deck are twelve machine guns, and in other respects the vessel is made suitable for an armed cruiser.

"DON'T CARE TO EAT."

It is with the greatest confidence that Hood's Sarsaparilla is recommended for loss of appetite, indigestion, sick headache, and similar troubles. This medicine gently tones the stomach, assists digestion and makes one "real hungry." Persons in delicate health, after taking Hood's Sarsaparilla a few days, find themselves longing for and eating the plainest food with unexpected relish.

DR. T. A. SLOCUM'S

OXYGENIZED EMULSION OF PURE COD LIVER OIL. If you have tightness of the Chest—Use it. For sale by all druggists.

## Fort Warren

Voluntary Statement from Mr. H. Graham, Ph. G., Hospital Steward, U. S. A.

Fort Warren, Boston, June 15, 1891.

"C. I. Hood & Co., Lowell, Mass.:

"My wife and child have been taking Hood's Sarsaparilla for the past two years and it has done them both an incalculable amount of good. We came here from Florida, one of the yellow fever districts. On arrival they were weak, anæmic and thoroughly out of tone in every way. I tried them with iron, quinine, etc., etc, but with no benefit.

Hood's Sarsaparilla

was recommended highly by a personal friend in the service, and I can truly say that it is just as good as you state. Will take precious good care not to be without it hereafter.

"You are at liberty to use this letter together with my name for any purpose that you think serviceable, and more especially for those who I know are unhappy on account of ill health." H. GRAHAM, Ph. G., Hospital Steward, U. S. Army.

N.B. Be sure to get

Hood's Sarsaparilla

The best blood purifier, the best nerve tonic, the best building up medicine.

A Skin of Beauty is a Joy Forever.

DR. T. FELIX GOURAUD'S

ORIENTAL CREAM, OR MAGICAL BEAUTIFIER

PURIFIES AS WELL AS Beautifies the Skin. No other cosmetic will do it.

Removes Tan, Pimples, Freckles, Moth-Patches, Rash and Skin diseases, and every blemish on beauty, and defies detection. On its virtues it has stood the test of 40 years; no other has, and is so harmless we taste it to be sure it is properly made. Accept no counterfeit of similar name. The distinguished Dr. L. A. Sayer, said to a lady of the *hautton* (a patient): "As you ladies will use them, I recommend 'Gouraud's Cream' as the most harmless of all the skin preparations." One bottle will last six months, using it every day. Also Poudre Subtile removes superfluous hair without injury to the skin. FERD. T. HOPKINS, Proprietor, 37 Great Jones St., N.Y. For sale by all Druggists and Fancy Goods Dealers throughout the U. S., Canada and Europe. Beware of base imitations. \$1.00 reward for arrest and proof of anyone selling the same.

When I say I cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give EXPRESS and POST-OFFICE. H. G. ROOT, M. C., 186 ADELAIDE ST. WEST, TORONTO, ONT.

I CURE FITS!