

## SCIENTIFIC AND SANITARY.

THE question was often asked during the Toronto Exhibition by those doing the Main Building, "Why is that stair so crowded?" The answer was, "They are all looking at and admiring the Pictures of the WONDER LAND through which the C. P. R. passes." All the walls of the south-eastern stairway of the main hall were hung with large and elegantly framed Pictures of Scenes on the Line in and through the Rockies, among which were:

Banff Springs, Heart of the Selkirks, Great Glacier, Great Cedars, Upper Kicking Horse, Fraser Canon, Albert Canon, Mount Stephen, The Loops, Hermit Range, Otter Tail Range, Threshing in North-West, Harvest in North-West, Harrison Hot Springs, Around the World, Empress of India.

Should any of our readers desire copies of these views, Hextograph copies may be obtained at a moderate cost at the C. P. R. office, corner Yonge and King Sts., Toronto.

A SHORT time ago the five-ton fishing schooner Lulu, while off Port Canovas, 250 miles south of San Diego, Cal., had a strange experience. Something thumped her terrifically from below. The vessel raised out of the water from the middle, as if forced up by a powerful jackscrew. She went up like a flash and fell back just in time to right herself. Then something struck the rudder a powerful jolt. The next instant a huge whale, appearing to be wounded, threw water from his spouting apparatus all over the vessel. The monster swam rapidly away, spouting at irregular but frequent intervals, and the two old salts got down on their knees and offered up thanks for their safe delivery. The schooner is at San Diego for repairs.—*Philadelphia Record.*

As a result of numerous experiments it has been found that iron rust often plays an important part in the cause of fires. When oxide of iron is placed in contact with timber excluded from the atmosphere, and aided by a slightly increased temperature, the oxide will part with its oxygen and be converted into very finely divided particles of metallic iron. These have such an affinity for oxygen that, when afterwards exposed to the action of the atmosphere from any cause, oxygen is so rapidly absorbed that these particles become suddenly red hot, and, if in sufficient quantity, will produce a temperature far beyond the ignition point of dry timber. It is suggested, therefore, that whenever iron pipes are employed for the circulation of any heated medium, whether hot water, hot air, or steam, proper precautions should be taken to prevent them from rusting when in contact with woodwork.

## "August Flower"

**Dyspepsia.** There is a gentleman at Malden-on-the-Hudson, N. Y., named Captain A. G. Pareis, who has written us a letter in which it is evident that he has made up his mind concerning some things, and this is what he says:

"I have used your preparation called August Flower in my family for seven or eight years. It is constantly in my house, and we consider it the best remedy for Indigestion, and Constipation we have ever used or known. My wife is troubled with Dyspepsia, and at times suffers very much after eating. The August Flower, however, relieves the difficulty. My wife frequently says to me when I am going to town, 'We are out of August Flower, and I think you had better get another bottle.' I am also troubled with Indigestion, and whenever I am, I take one or two teaspoonfuls before eating, for a day or two, and all trouble is removed." ©

**Constipation** of August Flower, and I think you had better get another bottle. I am also troubled with Indigestion, and whenever I am, I take one or two teaspoonfuls before eating, for a day or two, and all trouble is removed." ©

Minard's Lintment cures Distemper.

FATIGUE is measured by the reaction of time. Galton, the English psychologist, discovered a method of measuring the degree of fatigue which is very rough, but it illustrates in a general way what I mean. If a teacher were to wish to learn just how fatigued her pupils were she might discover by placing them in a ring, all holding each other's hand, starting with the teacher. If each were to press with his right hand the left hand of the person next to him, and as soon as that pressure were felt by the next, press in turn the right hand of the person next in order, it would be found that the time for the pressure to traverse the circle would vary with the degree of fatigue of the pupils and the relative amount of time, the teacher would have an infallible test of the pupil's fatigue.—*New York World.*

ASIATIC cholera, so called from the fact that it is a disease endemic in parts of Asia, is a malignant disease of the blood, caused by the presence in the intestines of bacilli in countless myriads. This bacillus, discovered by Koch, and named the "comma" bacillus, because it resembles the comma in shape, increases by segmentation; that is, it divides itself into two parts, each becoming of full size and dividing again. Cholera may only be caught by taking the bacilli into the mouth and stomach in some way. They are infinitely small, so small that I have no words in which to convey an idea of their lack of size. They may be carried in the dust blown about the street, but the media through which they usually reach human beings are the water drunk or the food eaten. The spread of cholera, it being a purely infectious disease, and requiring the bacilli to be swallowed, is through the persons infected or suffering from it or through their infected clothing. How long the bacilli will remain active in a dry state is not definitely known, but for practical purposes I can say that any clothing exposed to infection is dangerous so long as the bacilli have not been killed. Cholera, like other diseases we call epidemics, spreads along the ordinary routes of travel. Each person infected becomes in turn a centre of infection for others, and the disease would therefore move from country to country, like the widening circles in water, were there no travel whatever. The universal movement of to-day, however, hastens its march greatly. While Cholera is endemic in Asia, and always makes its appearance during such great religious festivals as the pilgrimage to Mecca or the festival of Juggernaut, it does not travel to Europe every year. This is because the disease does not always acquire that virulence which will develop a germ of sufficient malignity to travel. Why this should be so I do not know, but all facts point to the conclusion that sometimes the germ or bacillus is of greater potency and strength than at others, and this is true of all infectious diseases. The practical question which concerns us in this country is the danger to which we are exposed. This is not very great. In the first place the fact of the existence of the disease is known, and in such matters to be forewarned is emphatically to be forearmed. Second, the period of incubation of cholera is very short, being from a few hours to three days. Consequently, should any person infected board one of the ships coming here the disease would manifest itself before the arrival of the vessel. The advantage of this is obvious; no vessel could arrive here with cholera on board without the quarantine physicians finding or hearing of cases. The outbreak of typhus which occurred in the city some months ago was produced by people who, owing to the long incubation of typhus, passed quarantine while apparently well. Of course, the germs might come here in rags, but the chances that rags have of passing without disinfection are extraordinarily small nowadays. Generally speaking, the water supply of American cities is exceedingly pure. As water and food are the carriers of the germs, it follows that these must be carefully watched should the disease find a lodgment here. It is most fortunate that the cholera bacillus can neither stand heat nor cold. A few days of sharp frost will stamp an epidemic of the disease out. Food must be eaten while hot and fresh from the fire, and water, in cholera times, must be boiled. The extraordinary freedom from cholera which has always marked the Chinese of the southern provinces of the Celestial

Empire, living as they do amid almost typical cholera conditions, and with a disregard of sanitation almost sublime, has been credited to the universal habit of tea drinking. In other words, the fact that Chinese never drink water which has not been boiled probably accounts for that other fact that there are any Chinese left to drink anything. While this is putting it strongly, it is not an unpardonable exaggeration. Should the cholera come here we must then see to it that all germs are destroyed by heat before taking them into our bodies. It is necessary, too, that the most absolute cleanliness, especially of the hands, be observed, and particularly for those who handle food. The germs may easily be found on such things as straps in cars, balusters on public stairways, door knobs, money and the like. I cannot too strongly state the fact that the chances of infection, were the cholera to break out to any extent, would be almost innumerable and that no amount of precaution, therefore, can be too great. A person whose hands in any way come in contact with the discharges of a cholera patient could easily infect hundreds of people by leaving the bacilli where they could attach themselves to other hands. So far as the care of the health goes, were cholera to break out, it is not difficult to give directions. Fortunately for us when we are in health we can resist disease germs even if they are taken into the system. The care for ourselves during a cholera outbreak is, therefore, merely that care we should properly take at all times. We must take plenty of sleep, a fair amount of exercise, eat very plain food thoroughly cooked, drink water that has been boiled and allowed to cool in bottles on ice, let raw fruit alone, wear light flannels, and in general lead as rational a life as we may. No precaution against cholera or any other disease equals perfect health, for with this we can defy it.—*Dr. Cyrus Edson, in the North American Review for September.*

The merit of Hood's Sarsaparilla is not accidental but is the result of careful study and experiment by educated pharmacists.

THE number of volcanic vents still existing was fixed by Humboldt at 407, of which 225 have been active within the last century; it has since, however, been estimated that the Indian Archipelago alone contains more than 900. The most active volcanoes known are those on the Island of Stomboli, in the Mediterranean, at Sangar, in Peru, and Mount Etna. For more than 2,000 years the Stomboli Mountain has discharged lava constantly; the one in Peru has been throwing out masses of cinders, attended by terrific explosions, for 150 years, and Etna has a record of 81 eruptions since the sixth century B.C.

THE GENUINE MERIT of Hood's Sarsaparilla wins friends wherever it is fairly and honestly tried. Its proprietors are highly gratified at the letters which come entirely unsolicited from men and women in the learned professions warmly commending Hood's Sarsaparilla for what it has done for them.

Hood's Pills cure liver ills, jaundice, biliousness, sick headache, constipation.

MESSERS. C. C. RICHARDS & Co.

*Cents.*—I have used your MINARD'S LINIMENT successfully in a serious case of croup in my family. In fact I consider it a remedy no home should be without.

Cape Island.

J. F. CUNNINGHAM.

SO SAY ALL.—That MINARD'S LINIMENT is the standard liniment of the day, as it does just what it is represented to do.

RIDING TO SAVE A LIFE.—A Georgia newspaper gave an account of the heroism of John Potter, a ten-year-old boy who rode a horse twelve miles to Macon for the purpose of calling a physician to attend his mother, who was believed to be dying with colic. The doctor could not be found, but a kind druggist gave the lad a bottle of medicine, and ordered him to hurry home. The brave lad rode home, delivered the medicine, and then fainted from nervous exhaustion. The medicine cured the sick woman, and the boy is well. It is only necessary to say that the precious medicine was PERRY DAVIS' PAIN KILLER, which never fails to cure disorders of the stomach. 25c. old popular price, for New Big Bottle.



Emma J. Frederick

## Our Baby

Was a beauty, fair, plump and healthy. But when two years old *Scrofula Humor* spread over her head, neck and forehead down into her eyes, one great sore, *itching and burning*. Hood's Sarsaparilla gave her new life and appetite. Then the humor subsided, the *itching and burning* ceased, and the sores entirely healed up. She is now perfectly well. I. W. FREDERICK, Danforth street, near Crescent ave., Cypress Hill, Brooklyn, N.Y.

HOOD'S PILLS cure all Liver ills, biliousness, nausea, sick headache, indigestion.

A METEOR.—The Tiflis *Kavkaz* gives the following description of a meteor of great brilliancy which was observed at Tiflis, on May 10. It appeared at 11 p.m. in the west part of the sky, was of a round shape, and very brilliant. Three seconds after its appearance a part of it separated, moving towards the Mtatsminda mountain, and disappeared below the horizon, after lighting the slopes of the mountain, the central meteor continuing to move, but having lost for a few seconds its great brilliancy, which, however, soon reappeared. In about thirty seconds after the first appearance of the meteor, a second small part separated from it, increasing in size as it approached the earth. This also disappeared in the west, behind the same mountain, after having brilliantly lighted for two or three seconds its slopes and gorges. After that, the meteor took first a milky coloration, but soon became bright again, and of phosphoric aspect. A third part separated from it, but it was much smaller and not so brilliant as the two former. Finally the meteor disappeared behind the clouds—a white, lighted blot being seen through them—and gradually faded away. The phenomenon lasted altogether about three minutes.

MOTHER-OF-PEARL.—The most beautiful mother-of-pearl, unless that of the obalone be excepted, is obtained from the nautilus, which is a cephalon and related to the cuttlefish. Occupying only the mouth of its dwelling, the latter is composed of a series of empty chambers, each of which the animal has successively lived in and vacated as it grew bigger, building up behind it at each move a wall of purest pearl. These vacant rooms of pearl are all connected by a pneumatic tube, which enables the creature to so control the air supply in its house as to make the domicile lighter or heavier at will, in order to ascend or descend in the water. The shell is too thin to bear grinding, and so muriatic acid is used to remove the outer coat and disclose the exquisite nacre beneath. A method of treating such shells consists in drawing upon them with a brush and wax varnish any designs desired, after which they are placed in a bath of weak acid. The latter eats away the outer coat wherever it is not protected by the varnish, the result being a lovely cameo with raised figures in white on a pearly ground. Nature, however, beats art hollow at this sort of work. In the Cretaceous epoch, hundreds of thousands of years ago, there lived certain cephalopods, since extinct, which science calls "ammonites." The pearl they produced was of wonderful beauty, and many fossil ammonites dug up to-day have been so operated upon by the process of decay as to form elaborate patterns on the shells in pearl and white.—*English Mechanic.*