

## SCIENTIFIC AND SANITARY.

AN instrument has been invented in Germany by which the profile of a river bed may be taken automatically with sufficient accuracy. A curved arm rests on the bottom of the river, and by means of a recording mechanism the depth is automatically registered on a revolving drum.—*New York Press*.

A WRITER in a German paper gives the following as the proper temperatures for different sorts of beverages: Water, 51°; seltzer water and beer, 57° to 60°; red wine, 62° to 66°; white wine, 60°; champagne, 46° to 50°; coffee, 73° to 79°; beef-tea, 100° to 125°; milk, 60° to 64°; hot milk, 93° to 95°.

A MINIATURE photographic camera attached to the barrel of a gun is the invention of Mr. Lechner, of Vienna. By an automatic shutter, working in union with the trigger of the gun, the sportsman is able to obtain a perfect photograph of the bird or animal immediately before the shot or bullet has reached it.—*London Public Opinion*.

ONE of the largest fees paid to any medical man in our time was the sum of 250,000 marks, or £12,000, given to the late Sir Morell Mackenzie for his attendance on the late German Emperor. But the fee which Mr. George Lewis paid him a few months ago for removal of uvula was not bad, considering the time occupied in such a simple though delicate operation. It was 100 guineas.—*Chicago Graphic*.

PROFESSOR MICHELSON, of Clark University, Worcester, has accomplished the difficult feat of measuring the small part of a single wave of light with exactness, and, in conjunction with Professor Moreley, of Cleveland, has invented the apparatus for this purpose. Professor Michelson has been requested by the International Bureau of Weights and Measures to spend the summer at its establishment at Breteuil, near Paris, for the purpose of making an attempt "to give them a metric standard in terms of wave lengths of light." The instruments used by Professor Michelson are said to be marvels of delicacy and accuracy, and exceedingly expensive as well, and the making of a set of these instruments is also included in the invitation.

## "August Flower"

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.'"

Minard's Remedy for Catarrh is the Best, Easiest to Use, and Cheapest.

**CATARRH**

Sold by druggists or sent by mail.  
50c. E. T. Hazelton, Warren, Pa.

Minard's Liniment Lumberman's Friend.

At the present time lampblack is made largely from natural gas, but a plant is now being erected at Renfrew, Pa., which will obtain this material from crude oil. A patent process is being employed for the purpose, which will yield an average of thirty seven pounds of lampblack from each barrel of oil.

THE success which has attended the use of the electric search light on war vessels has resulted in its adoption on a number of passenger and freight ships engaged in the coastwise trade. This light is now used on the Providence River, and the navigation of the Savannah River has only been possible at night by use of search lights. Now the steamers on the Eastern shore route, running out of Baltimore, are using these lights with marked success.

A GERMAN has recently patented a method of making platinum vessels for concentrating acids, the new feature being that of coating the platinum with gold. It is said that such a coating adds very materially to the life of the vessels. The method of coating the platinum sheets consists of heating them to a temperature higher than the melting point of gold, and then running the molten gold over them. The double sheet of the two metals can then be rolled, when it is fit for making the vessels required for chemical laboratories and other purposes.

DR. FREUDENREICH has found by experiments that the cholera bacillus, if put into milk drawn fresh from the cow, dies in an hour, and in five hours if put into fresh goat's milk. The bacillus of typhoid fever takes twenty-four hours to die in cow's milk, and five hours in goat's milk. Other microbes suffer a like fate in varying periods. But he has also found that milk maintained for an hour at a temperature of 131° F., loses its power to kill microbes—a statement which is of interest in face of the common teaching which makes the purification of milk depend upon its being boiled.—*Annales de Micrographie*.

It is not generally known that there is a medicine called nitro-glycerine, which is as powerful in stimulating the organs as the explosive of the same name is in tearing rocks and trees. It is used by doctors only when their patient is at the point of death to revive the heart's action. It operates in this manner: There is a certain nerve which, in a healthy man's body, keeps the heart from beating too fast—acts as a sort of brake—but when the body is diseased and the heart movement sluggish, the nerve tends to stop the heart's action. The nitro-glycerine paralyzes this nerve and disencumbers the heart.—*New York Ledger*.

THE largest sun spot that has made its appearance since 1883 became visible to the naked eye on February 10th, the observer, of course, having the protection of a smoked or deeply-coloured glass. The first careful observations of it at the Dudley Observatory, Albany, by Professor Lochner, indicated that the spot, or rather group of spots, covered a disturbed area of 140,000 miles in length, and from 90,000 to 100,000 miles in width. The principal spot had, according to Professor Lochner, two nuclei, each having a diameter of about 14,000 miles, while the penumbra around the principal spot had an extreme width of 65,000 miles.—*Scientific American*.

As a specimen of what selection will do, it may be observed that roosters and hens among the Rucuyenne tribe of Indians in the western part of French Guinea are perfectly white. Not a coloured feather can be found among them. The natives have no tradition of a time when their ancestors had fowls of other colours, but the white chickens are probably explained by the fact that white feathers are the choicest ornaments among this people, and they will not wear feathers of any other colour. In fact, their fowls are raised more for their feathers than for the cooking pot. It is supposed that a long time ago, when their ancestors chose white as their favourite colour, they gave the preference to those fowls which were nearest white, reserving the others for the cooking pot, and by constantly breeding from fowls that were white or nearly so, the present breed of chickens was evolved.—*New York Sun*.

AN active competition has for a long time past been carried on among the English iron-masters as to the degree of thinness to which cold iron could be rolled. In one case the sheets have been rolled to an average thickness or thinness of the eighteen-hundredth part of an inch—in other words, eighteen hundred sheets of this iron, piled one upon the other, would measure only one inch in thickness. And this marvellous fineness of work may be more readily understood when the fact is borne in mind that the great number of 1,200 sheets of the thinnest tissue paper measures a slight fraction over an inch. It also appears that these wonderful iron sheets were perfectly smooth and easy to write upon, notwithstanding the fact of their being porous when held up in a strong light.—*The Age of Steel*.

THE old apothegms that "hard work is happiness," and "genius is only continued patience," find an interesting verification in the career of Pasteur, the great French chemist. In his youth he is said to have risen at four o'clock in the morning to go to his laboratory, where he was accustomed to remain, with but few interruptions, until nine at night. The story that tells how he was found in his laboratory when due at the altar to marry the rector's daughter, at Strasburg, is well known. Now, at sixty-five, he still labours over his experiments with unremitting eagerness, and with all the fine enthusiasm of youth. He has found it necessary, in his search for microbes, to gather a veritable menagerie of the smaller animals—rabbits, guinea-pigs, monkeys and dogs—about him.—*Harper's Bazar*.

THE prominence given to a lecture by the German doctor, Dr. Billroth, on the wounded in war, has induced Mr. Archibald Forbes to write on the subject. Dr. Billroth estimates that of the casualties at Weissenburg and Worth during the Franco-German war, 80 per cent. of all the wounded were caused by rifles, about 15 per cent. by the large guns and not quite 5 per cent. by the lance and sword. Mr. Forbes, however, says that the statistics for the whole of the war on the German side prove that over 90 per cent. were due to rifle fire, about 9 per cent. to artillery and about 1 per cent. to cold steel. The smallness of the mortality from the French artillery is explained by the fact that their artillery was notoriously badly served. Dr. Billroth believes that the future will see a still greater proportion of deaths resulting from rifle fire than from shell. Mr. Forbes points out that, in doing so, no account has been taken of the probable use of highly destructive explosives in the shells of the future.—*Army and Navy Gazette*.

It is not theory but fact—that Hood's Sarsaparilla makes the weak strong. A fair trial will convince you of its merit.

A MYSTERIOUS ringing of electric bells in a Swiss house was traced to a large spider, which had one foot on the bell wire and another on an electric light wire.

THE WONDERFUL SUCCESS of Hood's Sarsaparilla as a blood purifier entitles it to your confidence. No other preparation has such a record of cures of Scrofula, Salt Rheum, Blood Poisoning, or other blood diseases. To try it is to know its merit. Be sure to get Hood's Sarsaparilla.

FOR a general family cathartic we confidently recommend Hood's Pills. They should be in every home medicine chest.

MESSRS. C. C. RICHARDS & Co.

Gents.—My horse was so afflicted with distemper that he could not drink for four days and refused all food. Simply applying MINARD'S LINIMENT outwardly cured him.

Feb. 1887.

CAPT. HERBERT CANN.

MESSRS. C. C. RICHARDS & Co.

Gents.—I have used your MINARD'S LINIMENT for bronchitis and asthma and it has cured me. I believe it the best.

Lot 5, P. E. I.

MRS. A. LIVINGSTON.

DR. T. A. SLOCUM'S

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

Minard's Liniment Cures Garget in Cows.

## March April May

Are the best months in which to purify your blood, and Hood's Sarsaparilla is the best medicine for the purpose.



Mrs. M. E. Merrick,  
of Toronto.

We commend this letter to all suffering women: "For a good many years I have been suffering from catarrh, neuralgia and

### General Debility

I failed to obtain permanent relief from medical advice, and my friends feared I would never find anything to cure me. A short time ago I was induced to try Hood's Sarsaparilla. I was unable to walk even a short distance without feeling a

### Death-like Weakness

overtake me. And I had intense pains from neuralgia in my head, back and limbs, which were very exhausting. But I am glad to say that soon after I began taking Hood's Sarsaparilla I saw that it was doing me good. When I took 3 bottles I was

### Cured of Neuralgia

I gained in strength rapidly, and can take a two-mile walk without feeling tired. I do not suffer nearly so much from catarrh, and find that as my strength increases the catarrh decreases. I am indeed a changed woman, and am very grateful to

## Hood's Sarsaparilla

for what it has done for me. It is my wish that this my testimonial shall be published in order that others suffering as I was may learn how to be benefited." MRS. M. E. MERRICK, 57 Elm Street, Toronto, Ont.

Hood's Pills cure all Liver Ills, Biliousness, Jaundice, Indigestion, Sick Headache.

AN English concern is now successfully making flexible metallic tubing that is perfectly tight and capable of resisting high steam or hydraulic pressure. The tubes are made from strips of metal of the required length, breadth and thickness. The strip is fed into a machine in which it is first corrugated longitudinally with a wide and a narrow corrugation, the two running side by side. The strip is carried forward and is coiled spirally around a mandril in such a way that the smaller corrugation interlocks with the larger one, forming a piston joint. Sufficient spring is left on the tube to cause a perfectly tight joint to be formed.—*Philadelphia Record*.

THE *Scientific American* gives the following estimates of the duration of the life of various animals: Elephants, 100 years and upward; rhinoceros, 20; camel, 100; lion, 25 to 70; tigers, leopards, jaguars and hyenas (in confinement), about 25; beaver, 50; deer, 20; wolf, 20; fox, 14 to 16; lamas, 15; chamois, 25; monkeys and baboons, 16 to 18; hare, 8; squirrel, 7; rabbit, 7; swine, 25; stag, under 50; horse, 30; ass, 30; sheep, under 10; cow, 20; ox, 30; swans, parrots and ravens, 200; eagle, 100; geese, 80; hens and pigeons, 10 to 16; hawk, 30 to 40; crane, 24; blackbird, 10 to 12; peacock, 20; pelican, 40 to 50; thrush, 8 to 10; wren, 2 to 3; nightingale, 15; blackcap, 15; linnets, 14 to 23; goldfinch, 20 to 24; redbreast, 10 to 12; skylark, 10 to 30; titlark, 5 to 6; chaffinch, 20 to 24; starling, 10 to 12; carp, 70 to 150; pike, 30 to 40; salmon, 16; codfish, 14 to 17; eel, 10; crocodile, 100; tortoise, 100 to 200; whale, estimated, 1,000; queen bees live 4 years; drones, 4 months; worker bees, 6 months.