

Science AND Invention

The British government in India is considering a project to link together the rivers Indus, Jhelam, Chenab, Beas, Ravi and Sutlej, in order to equalize the flow of water for irrigation purposes. Thus when there is a flood in one of the rivers a part of the water can be diverted to a point where it may be more needed. In this way it is believed that the district of the Punjab, a name which means the Five Rivers, can be assured a sufficient water-supply at all seasons.

The Philippine Journal of Science recently published a list of 68 kinds of trees growing in the Philippine Islands, producing wood of commercial importance, belonging for the most part, to families and genera but little known to the botanists of the temperate zone. The list includes only dicotyledonous woods, and not the palms, bamboos and screw-pines which also abound in the islands. An interesting fact is that growth rings seem to be characteristic of only a part of the Philippine trees. Many show rings of seasoned growth when young, but not afterward.

An important phenomenon of recent recognition in bacteriology, says Dr. Simon Flexner, is that of the "microbe-carrier," by which is meant an individual who harbors disease-germs while apparently suffering no ill effect himself. The existence of such cases has been known for some time with regard to the bacteria of diphtheria, but more recently the phenomenon has been shown to exist for the germs of typhoid, dysentery, plague, cholera, and many other infectious Protozoa. Bacteriologists are also learning, says Doctor Flexner, that while the forces of immunity may be in active operation as far as tests with blood made outside the body indicate, the very bacteria from and against which such forces have developed may be still surviving in the body.

Commenting upon a recent German book on the interior state of the earth, Dr. A. C. Lane, well known for his researches on this difficult subject, makes a very interesting remark. He says that without making a sweeping statement at the start, as to the gaseous interior of the earth, it is perhaps safe to say, in view of what we know, that "some of the elements of the earth's interior are in a gaseous condition, and the earth, for them at least, might be likened to a toy balloon, but one in which the gas was so condensed, under such pressure, that one could easier dent a steel ball than it. Under conditions of temperature not easy to disprove, that should be the condition of all the earth's elements toward the center." Dr. Lane adds that the study of seismic vibrations will probably settle this question.

The average citizen, it is safe to say, has a very hazy idea concerning the size and constitution of the United States Army. A writer in Harper's Weekly gives some interesting facts bearing upon this matter. The government dreams of an army numbering 70,000 men. The present strength is 57,000. Of the theoretical 70,000 soldiers the fifteen regiments of cavalry, which never lack their full complement, comprise nearly 14,000 officers and men; the six regiments of field artillery, 5,500; the coast artillery corps close upon 20,000; the thirty regiments of infantry, 27,000; the engineers, 2,000, and the remainder consist of the staff corps, Indian scouts, and a small number of native soldiers in Porto Rico and the Philippines. The total number of commissioned officers amounts to about 3,900.

LONDON POLICE.

Poorly Paid Brits Who Cannot Be Bribed.

The police of London, England, have just been through a severe investigation by a royal commission which is a sort of glorified legislative committee. All sorts of people came forward with charges against the police, but only two or three alleged that they had bribed policemen, and in every case the charges were lacking in proof and were regarded as merely spiteful by the members of the commission. Nearly every police magistrate in London gave evidence, and they all agreed that the police were incorruptible.

High tribute was paid recently to British police court methods and British policemen by Police Magistrate Hogan, of New York, who not long ago was a London visitor. He said: "Everybody is treated alike, and I like the way your police do their duty. They don't seem to forget things overnight, as many members of the New York force often seem to do. I should say that the London policeman is remarkably honest and far too good for the job, considering the pay he gets."

The magistrate, whom the cops consider their worst enemy in the London police courts, is Mr. Plowden. Mr. Plowden's treatment of policemen, pro-

secuting in the witness box, is one of the sights of the town. But even he does not believe that the English policeman would accept a bribe not to do his duty.

The saloon law is very strict in England, and the opportunity is large for the species of "graft" said to be plentiful in many American cities.

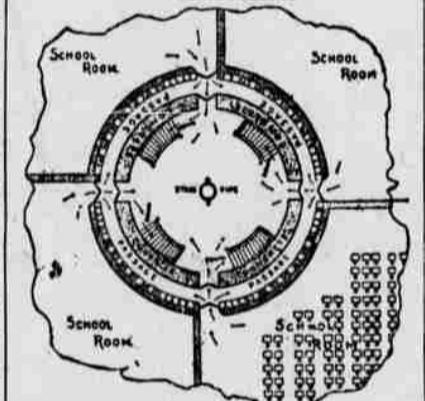
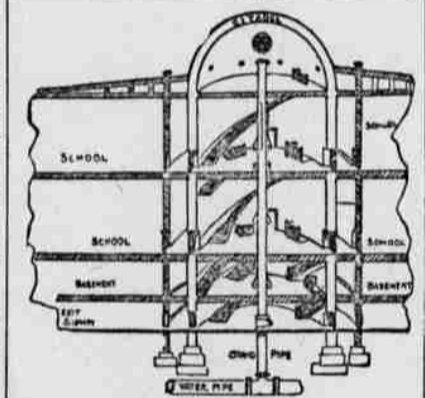
The pay of the English police force is miserable compared with American police salaries. In London \$6 a week is a cop's pay after a year's probation. With this in view possibly there might be more bribery and corruption, more open "graft," but for the organization and discipline of the force. These are simply superb. The roundsman, sergeant and inspector in England really work. The constable on the street dares not get off the beaten track. The punishment meted out to erring policemen is intensely severe. There are no mere reprimands. The English cop must be without blemish or—instant dismissal without any red-tape or appeal results.

CEMENT SCHOOL BUILDING.

Collinwood School Horror Leads to Citadel Scheme.

Following the recent Collinwood, Ohio, school fire horror, in which 163 children lost their lives, an unusual type of cement construction for school buildings is proposed in the Cement Age. Use of the new construction, it is insisted, will absolutely guard against perils of fire and panic, such as occurred at Collinwood.

The main feature of the new type is a circular, central citadel, extending from basement to roof, an independent structure around which school rooms



PROPOSED CEMENT CITADEL.

can be built. These are connected with the citadel by fire doors. Inside the citadel, which is to be fireproof, are stairways of sufficient capacity to provide for the ready exit of the children. Once inside the citadel, the children can take their time in leaving, as it is heat and smoke proof. A stand-pipe, running from the water mains to the roof, gives firemen an opportunity to work in a protected position, the walls being punctured with numerous loop holes through which the hose can be operated.

Striking an Average.
The children were not allowed in the kitchen, but nobody had ever forbidden their sniffing outside the door to catch the delicious odors which could be obtained by a close application of a small nose to a crack.

"Why, Ethel," said Mrs. Harwood, who discovered them in the entry just outside the kitchen door one Saturday morning, "why are you twitching Tommy and slapping him?"

"'Cause he isn't playing fair, mother," said Ethel. "He's had five smells and I've only had four, and it's my turn."

"I am, too, playing fair," asserted Tommy, his utterance smothered as he again applied his nose to the crack. "I've got an awful cold, and I can't smell half as much as she can!"

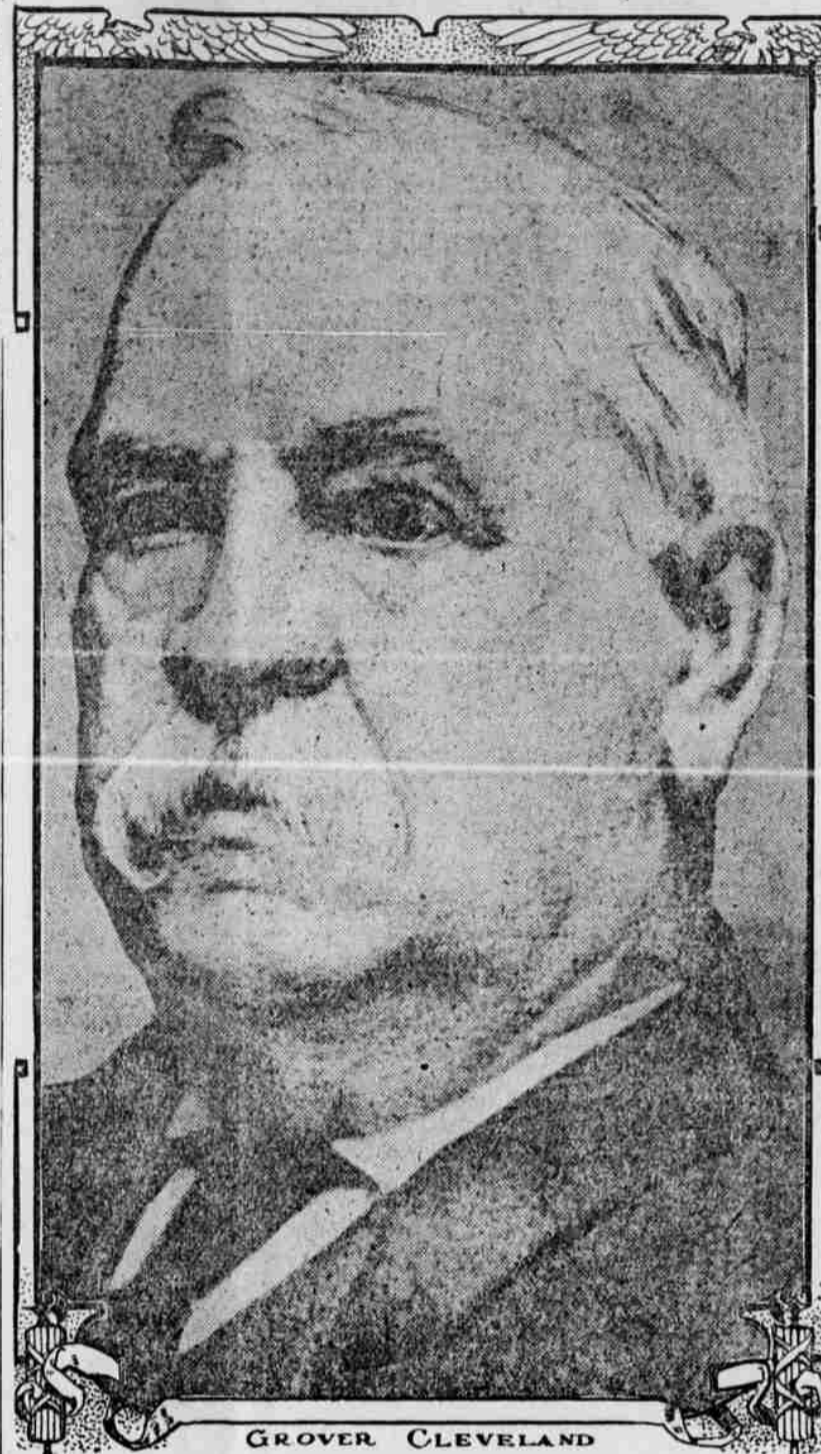
"An Army Contract."
In a street of Edinburgh one day a dusty soldier went up to a little bootblack and told the boy to brush his boots and polish them well. The lad looked at the big Scots Gray and shouted blithely to another bootblack: "Haw, Sandy, come over an' gie us a haund!" with his hands curved round his mouth to form a speaking trumpet. "See wha's here wi' me! I've got an army contract."

What Man Wants.
"Man wants but little here below," So some old poet said. Yet he don't close the openings He wears each side his head. —Toledo Blade.

The life of a woman whose husband has no bad habits must be rather monotonous.

EX-PRESIDENT CLEVELAND

Born: Caldwell, New Jersey, March 18, 1837.
Died: Princeton, New Jersey, June 24, 1908.



GROVER CLEVELAND

CLEVELAND'S CAREER IN SHORT.

Born at Caldwell, Essex County, N. J., March 18, 1837. Christened Stephen Grover Cleveland.

In 1841 family moved to Fayetteville, N. Y.

Served as clerk in a country store. In 1853 was appointed assistant teacher of the New York institution for the blind.

For four years, from 1855, assisted his uncle in preparation of "American Herd Book," and had a clerkship in a law firm in Buffalo.

Admitted to the bar in 1859. Appointed Assistant District Attorney of Erie County Jan. 1, 1863.

Defeated for the District Attorneyship of Erie County in 1865.

Practiced law.

Elected Sheriff of Erie County in 1870.

Elected Mayor of Buffalo in 1881.

Elected Governor of New York in 1882 by a plurality of 200,000.

Elected President of the United States in 1884. Majority in the electoral college, 37.

Broke all records by vetoing 115 out of 987 bills.

Married Frances Folsom in the White House June 2, 1886.

Defeated in campaign for re-election in 1888.

Engaged in the practice of law in New York.

Elected President of the United States in 1892.

Settled Venezuela boundary dispute in 1895.

After leaving White House in 1896 established home for his family in Princeton, N. J.

Charge of the selection and placing of exhibits.

Natural Toothbrushes.
Natives of Somaliland have the whitest and best teeth of any people in the world, and the reason is not far to seek. Whenever they are idle they may be found rubbing their teeth with small pieces of wood—little twigs which are covered with a soft bark and which ravel out into bristles. This practice prevents the teeth decaying and of course keeps them in excellent condition. Just as one might pick a wild flower in the country, so the Somal native picks his toothbrush. They are never without their small twigs. Toothbrushes as we know them are unknown in Somaliland. Their own methods are undoubtedly the healthiest and certainly the cheapest, and it is a matter for wonder that we do not take a leaf out of their book in this respect.—Dundee Advertiser.

Not Guilty.
It is not always a guilty conscience that is taken by surprise, for sometimes the most innocent of men will start at a suspicious word. The following incident, which occurred in a hardware shop, is illuminating:

An elderly lady, dressed severely in gray, and carrying what looked very much like a bundle of tracts, approached the counter.

A clerk hastened to serve her. "What can I do for you, madam?" She leaned toward him.

"Have you—er—any little vises?" she inquired.

When the children of a family are named "Arabella," "Gwendolin," "Rupert," etc., it is a good sign the mother's favorite reading is not the Bible.



F. B. LOOMIS.
These three men have been named as commissioners general for the United States at the Japanese exposition in Tokyo in 1912. Loomis was formerly Assistant Secretary of State. He heads the commission and will receive \$8,000 a year for five years, beginning with 1909. He is very highly esteemed by President Roosevelt. Skiff was prominently connected with the World's Fair in 1904 and is now director of the Field museum in Chicago. Millet is the well-known American artist. Skiff and Millet will receive \$2,000 a year each for 1909 and \$5,000 a year for the next four years. The duty of the commissioners is to recommend to President Roosevelt and Congress the cost and character of the United States building and exhibits at the exposition, and later to take

F. J. SKIFF.

F. D. MILLET.

EUGENE V. DEBS.

The Nominee of the National Socialist Party for President.

For the second time Eugene V. Debs is the nominee of the National Socialist party for the Presidency. In 1904 he headed that party's ticket and made an aggressive campaign. He received a total of 402,536 votes, the largest vote in any State being 69,225 in Illinois. Had the Socialists been united, the result would have been even more flattering, for there was still another Socialist candidate in the field, Charles Hunter Corregan, the nominee of the Socialist Labor party.

Eugene V. Debs was born in Terre Haute, Ind., and began work as a lo-



EUGENE V. DEBS.

comotive fireman. He next entered commercial pursuits, branching out into politics and being elected city clerk of Terre Haute and then member of the State Legislature. He came into national prominence during the great railroad strike, which had Chicago as a center and in which he bore a leading part. He was secretary of the Board of Locomotive Firemen and president of the American Railway Union and served six months in jail for violating a Federal injunction during the conduct of the strike. Since then he has been conspicuous in the Socialist movement and enjoys a wide reputation as an orator. He is also an editor and thus from platform and sanctum teaches Socialist doctrine.

FRENCH MILITARY ATHLETE.



FRENCH ARMY'S STRONG MAN.

The French army has many strong men. Muscle is cultivated sometimes at the expense of other things, but the fact remains that frequently this Por-tho-like attainment comes in pretty handy. The French army in Morocco was kept busy between times at sports and games. One of the diversions of the soldiers was lifting heavy weights and some of them became able to do astonishing feats, one of which, taken from a photograph, is here shown. The cannon and equipment weigh many hundred pounds, but the soldier picked it up and carried it easily.

According to Hoyle.
Rev. Joseph Gravelly (giving his views of the evils of card playing during a pastoral call)—As I was saying, I am in doubt—

Parrot (interrupting eagerly)—When you are in doubt play trumps.

And no member of that family has been able to account for the parrot's utterance to the satisfaction of the pastor.—London Punch.

A Hard One.
Tommy—Say, mamma? Mamma—Well, what is it, Tommy? Tommy—How does a deaf and dumb boy say his prayers when he happens to have a sore finger?—Kansas City Independent.

The Main Thing.
"She has the face of a scraph!" declared the enthusiastic friend.

"That's all right," said the practical manager, "but has she the backing of 'n angel?"—Baltimore American.

Stand up for your rights. People may not like it at first, but they will soon learn to keep out of your way.

Lucky is the man who isn't sold when women go to market.