

## NOTES AND COMMENTS

Impressive figures recently published showed how systematically Germany was training her industrial army, from the rank and file up to the generals. The Teutonic example has been studied by British educators and officials, and a voluminous report has been issued by a department of the government recommending far-reaching improvements of the present schools and methods of public instruction. The committee finds lack of technical and industrial training to be one of the more prolific causes of idleness and misery. Thousands of young people, it says, drift from job to job, learning nothing well and unlearning something every year, until at 20 they definitely enter the ranks of the unskilled "casual" laborers. Meanwhile industry is hampered by lack of dexterity, efficiency and skill, and trade that would naturally go to England seeks other markets.

Here are some of the changes the committee recommends: Increased attention to the connection between day schools and evening schools and evening "continuation" schools; exemption from attendance at school between the ages of 14 and 16 only when the children are employed in suitable establishments; municipal and other registries to give advice to parents and others as to proper employment of children; the establishment of continuation schools where they do not exist and compulsory attendance up to the age of 17, employers to be required to allow children hired by them to attend such schools; statutory protection of children, working and studying, from overstrain; the adjustment of education to local needs and callings both in the day schools and the evening continuation schools.

The committee further recommends the training at public expense of teachers for the continuation schools. This, as well as the other reforms, would involve great additional expense, but the committee holds that there is true economy in liberal expenditures on education, general and special, industrial and technical. Taxation might be higher, but there would be more wealth and income to tax, and the burdens would be felt less than they are now. On this question, at any rate, there should be no difference of opinion between the government parties and the elements of the opposition.

It does not require much prescience to foresee that armaments will soon go the way of armor, and that twelve-inch guns will soon be as obsolete as the six-foot bow. The coming of the aeroplane will revolutionize everything. Austria, it is said, is about to launch out into a huge expenditure on Dreadnoughts. The king of Italy showed a keen insight into the probabilities of the future when he said two years ago: "Why should we spend two millions over a huge ironclad when there is every reason to believe an aeroplane costing no more than a motor car may reduce it to old iron before it leaves the stocks?"

The aeroplane dashing through the air at 100 miles an hour capable of dropping 100 pounds of high explosive or of asphyxiating shells on any point from any height is the nearest approximation which mankind has made to the discovery of vril. It was by the invention of vril—that potent compound of electricity and dynamite by which a child could destroy an army by waving a wand—that Lord Lytton prophesied the ultimate extinction of war. The aeroplane is the next step to vril. For it places illimitable forces of destruction at the disposal of any one who can raise \$50,000 and find half a dozen desperadoes to do his bidding. What this means is that the human race which has hitherto organized itself for defense from enemies on or below the world's surface is absolutely unprotected from attack from above. The opportunity which this gives to the anarchist and the desperado was perceived years ago by M. Azeff when he recommended the Russian revolutionists to resort to the aeroplane as the most effective means of destroying the government.

If the governments do not cease

their absolutely fatuous habit of preparing for war with each other they may find themselves confronted by forces of disorder armed with new and invincible weapons, against which they themselves will be powerless. Should they let hell loose by making war upon each other heaven itself would rain hell fire upon the modern cities of the plain. In sheer self-defense the instinct of self-preservation ought to compel governments to federate into one international world-state, with international tribunals interpreting the laws of an international parliament, whose decisions would be enforced by an executive without whose command appeal to force on earth, or air, or sea would be absolutely forbidden. This may read like Utopia. But it is the only alternative to the destruction of civilization. If we refuse to recognize that the aeroplane will soon render war impossible, human society may find itself hurled with hideous ruin and combustion down to bottomless perdition like Lucifer and his hosts in "Paradise Lost."

The minds of men, especially of ruling men, are slow to perceive the signs of the times. But the aeroplane, which renders armaments obsolete, will probably open their eyes to its significance by abolishing frontiers. The smugglers of the air will have everything their own way. It will be impossible to enforce the payment of customs duties on any goods save those which are imported by the ton. The drying up of the customs revenue may predispose governments first to reduce and then to abandon their armaments. But meantime all the more thoughtful among us will do well to fix our minds upon the supreme question: When the aeroplane comes and the old order goes what is to take the place of war?

### A CLEAN MOUTH.

Now and then one hears incredible stories of persons, otherwise apparently intelligent and cleanly, going round for months, and even years, with their mouths full of germ-laden, aching, decaying teeth.

These persons will give the most ridiculous reasons for their uncleanly folly. They are too busy, or they have an insane dread of the dentist, or some such nonsense. In the very poor and very ignorant all this may be understood and forgiven, but in other classes it is unpardonable. Luckily their number is small, and their punishment is sure. Very few of those who are children to-day will be able to say by and by that they suffer on account of neglect of their teeth in youth, but many adults can honestly say so now. The science of dentistry and the mechanics by means of which that science is applied have made enormous strides of late, and will undoubtedly continue to advance in the future.

The modern germ theory of disease as applied to the mouth and teeth has brought about so much exact knowledge of prevention and cure that soon a decayed tooth should be a disgrace to any civilized man.

It is universally accepted that a clean surface does not decay. All decay is caused by germs, and the germs cannot multiply and work evil unless particles of food are left on, under or between the teeth. When these particles are so left they first become softened by the saliva, and then afford lodgment for certain germs which excite an acid fermentation. The acid so formed attacks the enamel of the teeth, and this is finally perforated.

Now the door is opened for the germs of decay to enter. In this minute opening in the enamel they find a sheltered spot where they can increase, and by their action cause the destruction of the vulnerable dentine.

This whole process of the formation of the destructive acid may take place within a single day, if the toilet of the mouth is neglected. Seeing how easy it is for this destructive work to be started, one should make trips to the dentist very regularly, that damage already done may be repaired, and that the deposits which settle on the teeth in the form of tartar may be cleaned away. This tartar does serious damage as long as it is allowed to stay, and it cannot be removed by any home treatment.—Youth's Companion.

When a woman feels blue she weeps; when a man feels blue he "smiles."

Some girls sing inwardly in the parlor and scold inwardly in the kitchen.

Mr. Bragg—"I saw something new in dresses to-day." Mrs. Bragg—"Oh, what was it, John?" Mr. Bragg—"Your sister's baby—it's just two days old."

## YOUNG FOLKS

### PLANTING.

It was on a stormy winter evening that Aunt Ruth was called upon for a new game. "I think I will plant my farm," she responded. "Nice weather for it!" said Carl. "A raging blizzard, and thermometer at zero!" "It is the finest time for planting this kind of farm," said Aunt Ruth, smilingly. "My fields are all named alphabetically. What should you advise me to plant on my A land? Anybody may answer." "Apples!" cried Carl.

"You don't plant apples," said Bertha. "They plant the seeds. Don't they, Aunt Ruth?" "Yes, and this is a brand-new farm. I want it well stocked. Apples will be all right."

"Plant some asparagus," said Alice. "And apricots," added Norton. "I was just going to say that," said Bertha. "Now I can't think of anything else."

"Artichokes!" cried Carl. "I think I'll plant some anise," said Aunt Ruth, at that moment. "Oh, do!" replied Alice. "Anise candy is so nice!"

"Well, what shall I have in my B field?" "Beans and beets," answered Bertha. "Brussels sprouts," said Carl.

"And balm, for balm tea," added Aunt Ruth. "There isn't much in B. We'll begin on the C land." "Cabbages, celery, corn!" cried Alice.

"Oh, stop! You're getting them all! Cucumbers, cress, carrots, caraway—" and Carl paused for breath.

"Chicory, cauliflower, catnip, radish, Alice," and coriander, and—" "Chervil," put in Carl.

"What's chervil?" queried Norton. "Oh, something to use in soups and salads," answered Carl.

"Clover," cried Alice. "Don't believe there's another one," said Bertha.

"Currants," said Aunt Ruth, quietly. "They all laughed, while their aunt said she thought her C field was full enough, and asked for the D's."

"Dandelion," began Carl. "Dewberries," responded Bertha.

"Dill," said Alice. "D's seemed to be scarce, so Aunt Ruth proceeded. They went on until the S field was reached."

"Squashes. Do have plenty of squashes, so for once I can have all the squash pie I want!" cried Norton.

"Sage," added Bertha. "Summer savory," said Alice.

"Nobody spoke for a moment. Then Carl hastened to say, 'I thought I'd wait and see if you'd think of it, but it is left for me to propose a big, big strawberry bed!'"

"Oh," they cried, "the idea of our forgetting strawberries!" "There are some other beds—upstairs—that I think you have forgotten," said Mrs. Chapin, smilingly.

So, amid much laughing chatter, the remainder of the farm planting was postponed until another evening.—Youth's Companion.

### LUXURIOUS SLEEPING CARS

Those in India to Have Bathrooms and Other Conveniences.

The latest sleeping cars in India are fitted luxuriously. Like most foreign cars they are divided into compartments, but a corridor runs from end to end of the car. Each compartment contains two berths. The upper berth is of peculiarly ingenious design, so compactly constructed that a casual observer would fail to see how it can be lowered.

The compartments are large enough to accommodate the luggage that any two persons can require, and are fitted up with all kinds of conveniences. Every compartment has an electric fan under the control of the passengers, and of the three electric lamps one is a small night lamp that can be kept burning all night without inconvenience.

If a party is too large for a single compartment, says the Railroad Man's Magazine, a sliding door connecting with the adjoining compartment can be thrown open. On the other hand, if the passenger desires he can lock his door, pull down his Venetian blinds and be secure from intrusion.

At each end of the coach is a roomy bathroom, with a large bath tub sunk in the floor, the walls lined with mirrors, and equipped with every imaginable sanitary device. There is also a servant's compartment. It is said that this coach has been approved by the railway board as the standard type for Indian rolling stock.

Misfortunes often put us wise to our own carelessness.

## WHALE CATCH IS SMALL

### SLUMP IN THE ARCTIC FROM LAST YEAR'S RECORD.

Deep Sea Whalers More Unfortunate Than the Shore Fishermen.

Notwithstanding elaborate preparations and the keen vigilance of thousands of skilled shore whalers, the catch of bowhead whales this year will fall miserably short of that of any previous year.

Along the Siberian side and along the Alaskan side from Behring Strait to Point Barrow the showing of bone is very small. Owing to the ice conditions on the Arctic side the ships have been unable to get to the most westerly of the Siberian whaling grounds, but little more bone can be expected from THE UNVISITED POINTS.

The catch on the American side is especially discouraging. At Point Hope, where twenty-five large whales were taken last year, only thirteen were taken this year, and most of them were small and of little value on the Paris market. At Icy Cape, where ten or twelve whales were killed last year and from which point tons of bone were shipped, only 400 pounds of poor bone was secured this year.

At Barrow, where the largest whaling village in the world is to be found and where over 600 natives are directly dependent upon the industry, only eleven whales were captured and killed.

Unfortunate as the shore whalers were, the deep sea whalers were much more so. Owing to the uncertain condition of the bone market during the last winter only five whale ships are at work in the Arctic this year, and up to date

NOT A SINGLE CATCH has been made by any of them. Unless the whaling fleet now bound eastward for the shores of Banks Land has phenomenal success, it is doubtful if more than 15,000 pounds of bone will be marketed on the Pacific coast this year.

Paradoxical as it may seem, this shortage in whalebone may prove to be a great blessing for the whaling industry.

Last year the American market was swamped with 200,000 pounds of bone above its normal needs, for which, owing to a phenomenal catch, made by Norwegian whalers, there was no market abroad.

It is hoped that the present shortage will relieve the market both at home and abroad.

### HEALING IN OLD TIBET.

Used Methods 1,500 Years Ago That are in Practice To-day.

The ancients, priests and savants of Tibet, were skilful physicians when almost the whole of Europe was overrun by ignorant savages or semi-civilized barbarians.

The Russian Government recently received a petition from the Siberian Buddhists requesting that medical schools should be established among them in which the ancient Tibetan art of healing should be taught. In consequence of this strange petition the Medical Academy of St. Petersburg has been making investigations concerning the claims of the ancient Tibetan art of healing.

Tibetan hand-book of medicine which was known and used about 1,200 years ago, and even then was regarded as an "ancient" and venerated source of knowledge, was used as material for the investigation.

The Russian Academicians have thus made the astonishing discovery that this book described drugs and cures which European physicians "discovered" many hundred years afterward.

Thus the doctors of Tibet so many centuries ago were not only acquainted with the secrets of the entire human anatomy—how many bones there are in the human body, etc., the principal nerves, namely, ninety-nine—but knew that the skin contained eleven million pores. According to this venerable book, "the heart is king of all the organs and the support of life."

"Sickness in general originates owing to the evil and ignorance of human beings, especially owing to their inability to overcome their passions, which disturb the healthy nourishing of the human organs. All evil thoughts also have a harmful influence on the heart and liver."

The physicians of Tibet 1,500 years ago employed the same means of diagnosing the condition of a sick person as the physicians of the present day—they felt the patient's pulse, looked at his tongue, etc.

Among the "remedies" which they recommended were not only vegetable diet, baths, compresses, but also massage and cupping. What is more remarkable is that physicians who did not keep their instruments quite clean were severely punished. The ancient Tibetans were in this respect extremely modern. The old Tibetan medicine book prescribes that healthy persons should "lead an orderly, sensible manner of life, avoid all excesses and irregularities, also conscientiously cherish, keep clean, both soul and body."—Pall Mall Gazette.

## RELIGS OF ANCIENT CITY

### SAVANT'S DISCOVERIES ON THE SITE OF NUMANTIA.

Three Roman Camps Found—The Excavations Are Proceeding Rapidly.

The Cologne Gazette publishes an account of some remarkable excavations made at Numantia by Prof. Schulten. His discoveries comprise both the remains of the City of Numantia itself and also of three superimposed Roman camps on the hill of Castillejo, including the camp of the Roman Consul Mancinus, whose army suffered in 137 B. C. one of the worst disasters in Roman military history.

This camp is nearly identical with the present Village of Reneblas, from five to six kilometres east of Numantia, a position which agrees with the description of Appian

THE ARMED CAMP erected by Fulvius Nobilior in 133 P. C. The camp covers some forty hectares, and it lies on the slope of a long hill facing Numantia, whence the Romans could overlook the whole Numantian plain and the enemy's town without themselves being seen.

The location of the Roman camp was facilitated by the fact that the fortifications are still above the general level of the ground and are generally well preserved, a fact which is ascribed to the absence of trees. From a neighboring hill the whole line of fortifications can be seen, running in straight lines without regard for the inequalities of the soil.

The gate apertures, flanked by powerful towers and covered by transverse walls, at a distance, can plainly be seen. The walls are two and a half metres thick and extend for about five kilometres.

partly constructed of large blocks of stone, some being as big as two metres long by one metre high, the material used being easily worked limestone found near the camp. The camp is described as the oldest Roman camp in existence, and its remains as being of unexampled importance for students of Roman military history.

The excavations are proceeding rapidly. Already several barracks have been uncovered, and every day brings some relic of importance, the iron finds being particularly well preserved owing to the dryness of the climate. It is stated, however, that the funds supplied by the Kaiser, the Ministry of Cults and the Archaeological Institute are exhausted, and that further money will be needed to complete the excavations.

WHIPPED FOR BEGGING ALMS Vagrants With Smallpox Receive a Double Dose.

Until the recent trouble over the case of the aged beggar sentenced at the Middlesex Sessions to be whipped, there were probably not many people, outside the legal profession, who were aware that a man rendered himself liable to a flogging for simply asking alms.

Yet such has always been the law of England ever since the days of Bluff King Hal of monastery-suppressing and much-marrying memory. Even female beggars were whipped, and in public; nor was the practice discontinued until the year 1817, when it was abolished by statute.

Vagrants found, upon apprehension, to be suffering from smallpox—one of the commonest, as it was the most dreaded, of complaints in those pre-vaccination days—received a double dose. And it is noteworthy that all actors, or "strolling players," as they were then termed, were classed as vagrants on account of their profession, and, as such, were liable to be, and frequently were, whipped.

The whippings were mercilessly severe, too, in most instances, except where the sufferer was able to bribe the official whipper, when they frequently degenerated into a mere farce. Fourpence per flogging was the fee usually paid by the authorities to this individual, and for from two to seven shillings, paid in advance by the culprit, he would agree to so withhold his arm as to render its infliction a punishment in name only.

An ordinary cart-whip was at first the instrument of flagellation, then a newly-pulled willow-wand, and, lastly, a bundle of twigs, tied together, whence our birch. It is for this reason that mere beggars cannot be legally flogged with the "cat," as can highway-robbers and other similar violent characters, for this latter more severe form of whipping was only introduced into the civil code of laws at a much later date, and for the specific purpose of putting an end to the crime of garrotting. Of course, however, it had long been in use in the Army, under military law.

Never strive for an inside view of a bad egg.

## Fashion Hints.

FADS AND FANCIES.

The prevailing hat is the large black velvet. The days of the black and white hat are numbered.

The wired net bow as a hat trimming is revived again. Lynx is scarce and is generally replaced by black fox.

The new greens are the most vivid that fashion has ever known. Shepherd's check continues in all its vogue for little girls' frocks. Short wraps are still in the style, but not a great many of them are seen.

Newest skirts are somewhat wider, but the same straight silhouette continues. Blues inclined to peacock are taking the place of the gray and Copenhagen blues.

Plain tulle blouses are made effective by the addition of small black buttons. The pronounced feature of the autumn is the separate coat worn with the princess gown.

Stripes prevail in the latest French flannels, and some of them are highly effective. Black still indicates that it means to rule in tailor as well as in afternoon gowns.

Fur is to be generously used on many of the afternoon as well as the tailor made.

Among the colors that will be much worn are the blues, pink, brown, and a great deal of green. Jet embroideries are used as a trimming on pale colored satin as well as on all black foundations.

Olive green is a new shade hiding for favor, and leaf green, a delicate grayish green, is chosen second.

The newest outing hat of the year is made of soft brown leather, trimmed with a wing and a leather strap and buckle.

Even in children's clothes the ever present note of black is found, either as piping, revers, or trimming of some slight kind.

Skirts, while cut on broader lines, still retain more or less the sheath effect. The silhouette is almost exactly the same as it was last winter.

Many of the most elaborate wraps are assuming draped tunics lines, and have taken on the knottings and fussiness at the bottom which distinguished tunic original models during the summer.

Perhaps the newest note in evening gowns is the appearance of the girle. It is high and gives a contrast which is artistically necessary to the fullness appearing at the top of the skirt.

The swathed Arabian vogue, which had been promised a vogue, will, it now appears, be little in evidence, as they suit only a limited type and are lacking both in smartness and picturesqueness.

Women everywhere rejoice over the definite reinstatement of the cloth gown, since silks, satins, and velvets cannot be made to show the chic effect of a well made and smartly designed cloth dress.

Many of the new cuirass gowns are designed to hook under the left arm. This leaves an unbroken line at the front and back and it helps to carry out the idea of armor plate, which formed the original cuirass.

HEALTH HINTS. A bag of hot salt relieves neuralgia.

It rests you, in sewing, to change your position frequently. For cold in the head, nothing is better than powdered borax, snuffed up the nostrils.

Cure for Croup—One teaspoonful of vaseline given internally about twice a day. That a teaspoonful of ground mustard in a cupful of warm water is a prompt and reliable emetic and should be resorted to in case of poisoning.

To prevent accidents with bottles containing poison buy a dozen tiny bells and every time a bottle of poison is brought into the house tie a bell to the neck of bottle. Even in the dark the bell will tinkle its warning.

For Sleeplessness.—To those who suffer from sleeplessness. Repeat the first two verses of psalm 137: Except the Lord build the house, they labor in vain that build it; except the Lord keep the city, the watchman waketh but in vain. It is vain for you to rise up early, to sit up late, to eat the bread of sorrows; for so he giveth his beloved sleep. Repeat slowly and thoughtfully.

Mustard Plaster.—Trim the crust from a thin slice of light bread, then sprinkle it thickly with ground mustard. Spread a thin cloth over the mustard and dampen with vinegar or water. Your plaster is all ready, with nothing to clean up after making it, and much better than the old sticky batter plaster. A piece of bread well dampened is better as a poultice than either flaxseed or slippery elm, and will neither dry out nor sour so quickly.