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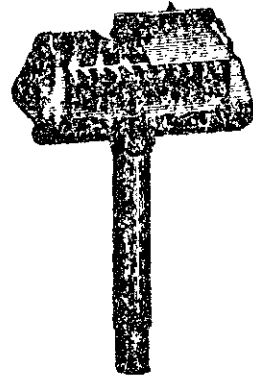
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THIS school is devoted to the teaching of science, as applied to the various engineering professions; viz., civil, mechanical, mining, and electrical engineering, as well as to architecture, chemistry, metallurgy, physics, and natural history.

Besides the above distinctly professional courses, the Institute offers scientific courses of a less technical character, designed to give students a preparation for business callings. A four years' course in biology, chemistry, and physics has been established, as preparatory to the professional study of medicine.

Modern languages are taught, so far as is needed for the ready and accurate reading of scientific works and periodicals, and may be further pursued as a means of general training.

The constitutional and political history of England and the United States, political economy, and international law are taught, in a measure, to the students of all regular courses, and may be further pursued as optional studies.

Applicants for admission to the Institute are examined in English grammar, geography, French, arithmetic, algebra, modern history, and geometry. A fuller statement of the requirements for admission will be found in the catalogue, which will be sent, without charge, on application.

A clear admission paper from any college of recognized character will be accepted as evidence of preparation, in place of an examination.

Graduates of colleges conferring degrees, who have the necessary qualifications for entering the third-year class in any of the regular courses of the Institute, will be so admitted, provisionally, on the presentation of their diplomas, and will be given opportunity to make up all deficiencies in professional subjects.

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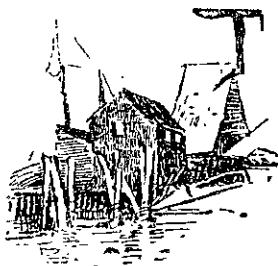
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THE accident that has just occurred on the Vermont Central, would have been robbed of half its horrors if the cars had not caught fire. And this turns the attention of all thinking men toward the cause of such an outbreak, and the possibility of preventing its recurrence. This is not the first or second time that the added horror of recording the roasting of pinioned men and women, who otherwise might have escaped with a broken leg or arm, has occurred. No later than five or six years ago, on the New York and Hudson River Railroad, a special train, filled with returning legislators from Albany, was overturned, and the whole wreck enveloped in flame—fire destroying what wreck had spared. The fault lies in the mistaken system of heating by stoves, instead of from the locomotive. If, by some system yet to be devised, pipe or hose attachment of sufficient strength to hold together when the train is on the rail, yet weak enough to part in case of accident, could connect the locomotive with the cars, and all

firing be done at that end, heating by transmission either of steam, hot water, or hot air, winter travel would be shorn of one feature, at least, of dread.

The Institute is scientific, and here is a field open for practice, if nothing more. The railway companies would gladly take advantage of any practical invention that seems at all feasible, and reward the inventor with a fortune as well as a name.

ONE prominent feature at the Institute for which we should be greatly thankful, is the absence of the many petty restrictions and annoying regulations under which the students of many other colleges suffer. The only laws laid down for us to follow, are those which control us within the buildings where we recite and work. No morning chapel or obligatory Sunday observances, no regulations about our conduct outside whatever, except that of course if anything were done to bring discredit upon the Tech., the student might be admonished. At other colleges the students are harassed by the faculty, who interfere with their amusements, prohibit certain athletics, and put restraint upon others,—in fact, treating a class of young men whose age would average above twenty-one, as if they were not yet out of leading-strings.

We owe our freedom in a great respect, no doubt, to the absence of a dormitory system; though even if we had such a system, we have confidence enough in our Faculty to say, that we do not think they would use their strengthened control in a tyrannical manner. As we are situated, it would be impossible to exercise any system of surveillance over us outside of school-hours. Each student lives by, and looks out for, himself alone; and has his own responsibility, especially, as is the case with most of us, if he is away from home. Though exposed directly to

the many unfavorable influences of a city life, there are few cases where the freedom is abused. We are old enough to lay out our own courses, and do not feel the need of compulsory laws to aid us.

Restraint, even when judiciously applied, is obnoxious to young men of the present age, and in many awakens a rebellious feeling which leads a man against his own interests. It is much better to feel a responsibility to one's self, and is, we think, in college life, far more productive of rational actions. The wild excesses and seemingly unexplainable proceedings which are peculiar to students in certain colleges, have an air of defied authority, which can spring only from the subjection to perhaps needless discipline.

IN the student, as in the pedagogue, there is a strong and unlovely bias in the direction of positivism and dogmatism. No one deserves the title of man, whose opinions are swayed by every wind of doctrine, willowy as the willow, blown hither and thither with every fresh impression. And the same thing can be said of any one who insists on the certainty of his superior knowledge and the impossibility of a mistake.

The unpleasant habit of thrusting our opinion, as a soldier does his bayonet, literally, down the throat of any one who may have the misfortune to get button-holed into a conversation, is too frequent a practice with the young idea.

The Freshman returns to his paternal hall, and one would think that Solomon, in all his glory, was intellectually a failure beside this *multum in parvo* of learning. The swathing-bands have not yet disappeared in the distance, when lo! he proclaims himself a man; corrects his professor's mistakes; hauls his father over the coals for expressing exploded views on questions of law, politics, and science, and astonishes the old gentleman by taking issue with him on religion. In fact, if we should take him

at his own value, we would possess a walking encyclopedia, whose knowledge on all points was infinite, and a mathematical certainty. To be able to assert, without fear of error, that every statement that falls from your lips is un-gainsayable, is to be above all human accountability, and dwell with the gods.

Such a character is unlovely in old age, but is detestable in youth, and, if persisted in, will act as an armed guard in keeping out all friendship and social intercourse, and make the possessor more of an exile than Napoleon on his lonely isle; for he *did* have friends.

THE Book Exchange has now been running for two weeks, and, so far, it does not appear to have been as much patronized by the students as one would have expected. In thinking over the reasons why such an evidently good way of selling your old books has not been utilized, we find but little cause for wonder. Most of the books which are used here are of a thoroughly professional nature, and are practically indispensable in the library of such an engineer as each one of us desires to be. Hence it is not surprising that there has been no marked desire to sell any of these. Again, there are some text-books which most of us have to use continually for reference, and for that reason do not wish to part with. Still, it seems to us that there must be a good many books which each fellow has that can be of no further use to him, but that can benefit him and some one else by being sold. We can only account for the non-appearance of many of these books in the Exchange, by assuming that the fact that there is an Exchange is not known to all. It is rather late now to urge the fellows to bring their books to the Exchange, but we hope that by next term it will be more popular. It is to be hoped that the Co-operative Society will not be discouraged by the present apathy, and give up the idea altogether. The Techs may be slow to make use of all their advantages, but, nevertheless, they are not entirely unappreciated.

ONE of the difficulties in the management of the Institute's affairs, is the arrangement of the studies in a tabular view, which shall be, so far as possible, satisfactory alike to students and professors. The complexity of this problem is due to the many conditions which must be fulfilled, requiring a suitable time for all lectures, recitations, drawing, laboratory, and shop-work of each class, and on alternate days, when practicable, but without interference of exercises for either instructors or students, requiring also a judicious arrangement of the blank spaces on the schedule, and attention to the time of day when the exercises ought to take place.

Any one at all familiar with the great number of studies occupying the members of our different classes and their widely differing natures, will see what an undertaking the preparation of the tabular view is.

Now, although in most cases the arrangement seems very satisfactory, there is still a chance for improvement in one direction. The more solid scientific work does not seem suitable for the hour from twelve to one o'clock. This hour is generally given to the lighter work of the languages, or English studies, or to drawing, or the laboratory, but Sophomore physics seem to hold out from year to year against the rule. This course of lectures is, at its time, one of the most difficult which a Tech encounters, yet he is obliged to struggle with all the intricate reasonings, explanations, and descriptions given in a lecture, at a time when he is exhausted by a morning's work, sleepy, and hungry, even faint, sometimes, unless he shall have fortified himself with a sandwich or an apple just before entering the lecture-room. If these lectures could be given an hour earlier, the result would be certainly greater comfort to the class, better attention, and consequently a better understanding of the subject, while the time allowed the instructor for preparation of apparatus and blackboard notes would still seem ample.

THERE is an old college saying that the Freshman is sure he knows everything, the Sophomore thinks he knows everything, the Junior begins to think that he knows nothing at all, and the Senior is sure that he knows nothing. There is much more of truth, and less of nonsense, in this saying than at first might appear, and perhaps in few places is this saying exemplified better than here at the Institute. The Freshman comes here with the idea that he is going to be, let us say, a mining engineer. He knows what he is going to do, and can be told but little. He is going to study for four years, and then go out into the world a full-fledged M. E. No idea of the vastness of the subject has yet dawned upon him, and he thinks that four years study is going to accomplish everything. By the time he gets to be a Sophomore, however, he has met with a good many difficulties, and the subject looks bigger to him. Still, he does not change his ideas very much, though they become a little unsettled. A little more study than he anticipated at first will make everything all right, and so he gives but little more thought to this subject. When our Sophomore has become a Junior, however, the range of subjects presented for his study has enormously increased. It seems to him as if each particular branch would take years to learn thoroughly, in all its intricacies, and he begins to think he doesn't know so much after all. After a year's more study he becomes certain that his ideas on this subject are now right, and that probably he never will know each branch perfectly, but will spend the rest of his life in continually learning new things about his profession. And we believe that the man who acknowledges the vastness of his profession, and the small knowledge he individually possesses concerning everything in it, is really infinitely superior in information and the practical application of his knowledge, to the man who thinks there is nothing more for him to learn. Truly, it takes a lifetime to learn one thing thoroughly.

SOME one has truly said, that a college paper is a better criterion of the spirit of the institution and the character of the students than are its catalogues, or other official communications. The reason is easily discovered. Students select a college because they expect to find there, that which is congenial to their tastes; and once within the college, the college paper, being their mouthpiece, naturally expresses their ideas and sentiments. So from the character of the paper is divined the character of the students; and on the character of the students, depends that of the institution to which they belong. It becomes, therefore, the duty of each student to support the paper, not merely by subscribing to it, but also by contributing ideas, and evincing an interest. If the men find fault with the paper, they are condemning themselves. The paper is what they make it. If they complain that one element of the institution is more largely noticed than another, they are simply acknowledging that the too prominent element is more energetic, more keenly felt in the institution than their own. The remedy is in the hands of the students, and is applicable by them alone.

### To A "Skin Roll."

*The most useful of modern inventions.*

O little epidermal roll,  
 O timely and omniscient scroll,  
 Held deftly in the practiced hand!  
 Thou did'st fulfill the mind's demand,  
 And save full half our struggling band  
 From getting too far in the hole.  
 I recollect I sat up late,  
 In order that I might create  
 Some means by which my empty pate  
 Should next day be assisted;  
 Saved by thee from a hapless fate,  
 I left that tough "exam" elate,  
 For on thy face was many a date  
 Revealed when thou wert twisted.  
 Your saving me from direst dole  
 My ardent thanks enlisted;  
 I pledge to thee a brimming bowl,  
 O little epidermal roll. —*Trinity Tablet.*

### Like a Linden.

Like a linden, tall and stately,  
 Nodding to the breeze sedately,  
 Is the slender grace and beauty of the maiden that I love:  
 Like a linden's leaflets whisp'ring,  
 To each fleeting zephyr lisp'ing,  
 Is her dainty lingual leaflet very much inclined to move.

Never linden's stem as slim,  
 Or its even bark as trim,  
 As that fascinating waist I long so ardently to bound;  
 But I dare not take its measure,  
 For when last I had the pleasure,  
 She promptly went and advertised the matter all around.

When I ope the outer door,  
 Turn to say good-bye once more,  
 Her red lips are so near me that my poor head fairly  
 whirls,—  
 For I know that when I've kissed her,  
 She will run and tell her sister,  
 That plaguey little cousin, and some forty other girls.

But, in spite of all, you see  
 She's so very dear to me  
 That I really can't refuse her when she wants a valentine;  
 Though of course she's sure to show it,  
 And accuse me as the poet:—  
 Well,—I'll swear straight up and down it isn't mine!

B.

### A Biologist's Escape.

IT is well known that readers of THE TECH appreciate all tales with a flavor of the supernatural, and I have therefore ventured to put in writing a strange experience that lately befell me in the biological laboratory. It was one sharp winter evening, shortly before the semi-annual examinations, and I was sitting at the table in the southeast corner of the laboratory, with a huge pile of books staring me in the face. I was studying botany, and was doing my best to master the ponderous and involved sentences with which Sachs struggles to convey his ideas about the noble group of Protophyta.

Suddenly the air in front of me seemed to grow white, and I heard a rustling, as of the sound of many voices. At once it entered my mind that it was the night of all the year for maddened spirits to be abroad—the night of the meeting of the American Society for Psychological Research. Now was the time to make

some "original investigations," and possibly to gather in some valuable material for my thesis. Leaning forward, I turned the gas low, and strained my eyes out into the dense blackness. I became dimly conscious that I was being gazed at intently by a host of strange faces, and my teeth chattered in spite of my resolution to make the most of my opportunity. At length a voice broke the oppressive silence. I recognized, by some intuition, the voice as belonging to that eminent possessor of a branchiostegite — the Lobster. As he spoke he advanced toward the table, his protopodite trembling with suppressed emotion. Waving his chelæ in the air, he thus addressed his companions: "Fellow-sufferers in a noble cause, the auspicious hour has come! Never before, in the history of the lower invertebrata, has a more fitting subject for study presented itself. You see before you the topmost twig of the family-tree. Had not one of my remote ancestors developed his chelæ at the expense of the supraoesophageal ganglia, such a height might have been my own. But let that pass. An opportunity is at last presented us to retrieve all errors of this nature. From the gross anatomy and histology of this interesting specimen, we may derive many hints for our future advancement." So saying, he turned upon me his huge eyes, through which life must seem to him very checkered; and then, whirling about, beckoned to the indistinct shapes in the outer darkness.

As they came forward at the signal, I was surprised to notice many familiar forms among the number. A plump, well-dressed young lady with a delicate, pale blush suffusing the whole surface of the anterior adductor, I at once knew to be that juicy lamelli branch — the Clam. As she drew nearer, I was able to see beneath the folds of her mantle the tip of her tiny foot. I heard at the same moment a sweet, melodious sound, the source of which I could not for a time make out. Finally, I perceived the music was caused by the two aortæ playing a duet upon the organ of Bojanus. The tender mollusk shot soft glances at me, and murmured something about my having trifled with her heart. I was

about to reply earnestly that nothing had been farther from my purpose, when my attention was arrested by the remarkable actions of the next comer. A starfish came swooping across the table, making for my lady friend. As he drew closer he pressingly begged the mollusk to shelter him, as he was nearly exhausted by hunger. The bivalve seemed a little unhinged by this request, and remarked to the Lobster, who was standing near by, that some gentlemen were startlingly intrusive. There was hardly time to observe this little episode, when a host of objects presented themselves to my wondering gaze. Three amoebæ were sportively chasing an yeast-cell, who was evidently a politician, since he was declaring himself in a great ferment over the question of taking off the duty on sugar.

Behind this group, and a little to the right, was a diatom, with his sails spread, and taking every advantage of the currents of conversation on either hand. On the outer edge of the circle was something that looked like a huge sun, but which vanished every few minutes. I had about concluded that it was a flash-light, placed to guide to this spot all wandering, infusorial spooks, when it came quickly toward me. I then perceived that it was the contractile vacuole of a gigantic Paramœcium, and that it was merely a great storehouse of luminiferous ether. During the day it accumulated radiant energy by alternately contracting and expanding, and at night it gave out a brilliant light for the edification of its little world. Convinced that my thesis subject had been captured, I presumed to ask the Paramœcium a few questions about his marvelous possession, but was silenced by a discharge of trichocysts, which pierced my hand in several places.

And now the animal and vegetable ghosts appeared upon the scene in large numbers. Bell-animalcules, Hydræ and Monads jostled with Bacteria, Spirogyra, and Chara. The gown of this last lady attracted much attention from the assembled throng. She wore a green silk, cut bias, and trimmed with large masses of carpogonia and antheridia. The numerous whip-shaped

filaments of these latter ornaments gave a very striking effect to the whole costume. Her cortex consisted of the best silica to be had in the laboratory, and altogether she was perhaps as charming as any person on the table.

It was a beautiful sight. Lichens, tenderly carrying Protococci in their arms, were flirting with the Mosses. The Ferns were congratulating one another on the gradual decrease in size of the prothallium, and the concomitant increase in importance of the asexual generation. Myxamœbæ were dancing the schottische with the spores of Pilobolus, and the whole spectacle was one of life and gayety.

The Lobster called the vast assembly to order, and made a short speech, the words of which I was unable to catch. I saw, however, from the fierce glances directed at the spot where I sat, that there was no doubt about their purport. The company was then drawn up by the Lobster into a semblance of order, and a committee appointed to undertake the work of the evening. The Lobster was made chairman. He came toward me with a sphygmograph, for the purpose of registering my pulse-beats. I felt that I had no power to move. The instrument of torture was screwed tightly down upon my wrist. I tried to scream, but my voice was drowned in the general murmur of approbation that greeted the work of the Lobster. I was declared, on the authority of the sphygmograph, to have aneurism of the aorta, and for that reason it was decided to begin operations upon my head. The committee were in hot dispute over the question whether it was best to start first with the cerebrum or with the cerebellum. I was in utter despair. Suddenly the laboratory kitten bounded upon the table, with an exclamation of indignation, knocking down on the way the botanies of Sachs, Goodale and Vines, and three volumes of the Standard Natural History. My would-be dissectors sought refuge in speedy flight from the claws of the enraged kitten. My preserver bowed politely, and warned me not to delay my steps; for against the spirits of her own departed relatives, her intervention would be useless. She added, in a lower tone, that there were sev-

eral feline spooks who had their residence in the laboratory. I took the hint, and rushed from the room. At the first opportunity I revived my fainting strength with a careful "adjustment of the internal relations to the external relations." In consequence of this adventure the laboratory kitten is still alive and well, and has been received into the bosom of my grateful family.

L. A. B.

---

### Poker.

I would tell her, if I dare,  
But that twinkle says beware,  
And I only have a pair—  
Deuced small.

She is bluffing, well I know,  
Though there's not a look to show,  
And I feel it would be rash  
For me to call.

Oh, my fate was badly planned;  
If I only had the sand,  
I would ask her for her hand—  
Ah! but then,

I have called her once, you know,  
And 'twould not be *comme il faut*  
If I told her I should like  
To call again.

I. W. L.

---

### A Day on Black Mountain.

BLACK Mountain, or, as the guide-books call it, Sandwich Dome, is one of the prominent peaks of that cluster of mountains which lies almost due south of the Franconia range. The ascent of the mountain is usually made from the old Campton road, about two miles from its terminus at Waterville, New Hampshire.

On a clear day last August, a party made up of eight of the guests at Eliot's Hotel, in Waterville, started with a guide to climb the Sandwich Dome. The larger portion of our party were young people. The others, although older, were none the less merry. We left the hotel at nine in the morning, and were driven in barges to the foot of the mountain. We were accompanied by a number of friends who no doubt en-

vied our strength, but who did not themselves feel equal to so hard a climb.

People had told us that the first third of the way was the hardest, and we believed it before we had climbed fifteen minutes. It was like scaling the side of a house. In some places it seemed impossible to ascend farther, but we finally succeeded by availing ourselves of the hardy little spruces that offered their friendly support on either hand. We had climbed steadily for nearly an hour without being able to get any outlook, so thick were the trees on every side. All at once, however, we came out upon the bare cliff called Noon Peak; then we knew that the hardest part of our walk was over.

Let me say a word here about the odd name of the peak we were on. Noon Peak was so called by the settlers of this region, because at about midday it casts no shadow. The sun's rays fall almost directly upon it at that hour.

To return to our party. The path led along a ridge that rises gradually from Noon Peak to the summit. It took us a little more than an hour to walk the remaining distance. When we reached the summit, we seated ourselves on a large pile of rocks, which commanded a superb view of the Waterville Valley on one side, and of the lakes Squam and Winnipiseogee on the other.

The Appalachian Mountain Club has placed on the summit of every important peak in the White Mountains, a tourists' register. This consists of a strip of paper several yards long, wound tightly around a wooden pin; the whole being inclosed in a cylindrical bronze box, that looked at first sight like some kind of an infernal machine.

The leader of our party seated himself on the pile of stones that marked the place where the register was kept. He opened the box and read aloud some of the names which were written on the roll. The person who had placed the box on the mountain, and whose name headed the list, was, if I remember rightly, Prof. W. H. Niles. The roll was passed round, and each of the party wrote his name on it; the last man put

the paper into its case, and replaced it where it had been found.

It had been agreed before we started, that at two o'clock we should "flash" to the hotel. The hour arrived soon after we had finished eating our lunch. One of the gentlemen had a pocket-mirror, with which he obtained the proper angle, and sent a "flash" to our expectant friends in the valley. In a few moments return flashes came to us, and we knew that our signal had been seen.

It would take too much space to tell of all the exploits and adventures of that day. Let it suffice to say, that we all arrived safely at the hotel at nightfall, ready to do ample justice to the excellent supper that awaited us, and to enjoy the cheerful blaze of an open fire.

H. P. S.

#### A Biological Excursion.

A JOLLY instructor, and four equally jolly Techs, appeared at the door of Rogers early one afternoon last November, and seeing a depot car passing, raised a mighty shout that brought the gaudy vehicle hurriedly to a stop. We were biologicals, headed for Beverly Bridge, intent on business and pleasure. Whenever the biological stirs abroad he is taken for a fisherman, and this trip was no exception; for, before we had gotten aboard the car, no less than half a dozen fishy questions had been asked by Freshmen lounging on the steps, who think they are thus working hard now, but who, in the next year or two, will have this delusion completely knocked out of them, and will then wonder at their presumption.

We finally arrived at Beverly by the limited express,—a genus of train that stops at the sight of a red flag, and boasts a high-sounding name for its engine.

Beverly Bridge is a favorite place for collectors of zoölogical specimens, and is much visited by students of zoölogy. Though the marine life there is not very varied, the opportunities for collecting are so good as fully to make up for any deficiency in variety. The tide

was quite low that afternoon, and from the foot-path on the bridge we could see quantities of curious living things scattered beneath us in every direction, leading a life of apparent laziness, with naught to do but to eat and rest. We were disappointed in not being able to procure a boat from the man in charge of the draw; but, notwithstanding, each invested himself with a pair of tall gum boots, leaving his overcoat and shoes in the little house belonging to the keeper of the draw. Before going to work we lingered to admire the *Mayflower*, and wonder at the graceful curves of the yacht which so neatly frustrated John Bull's designs on the America's cup. We felt all the prouder of her when we learned that her designer, Mr. Burgess, is a well-known biologist, who can dissect insects quite as well as he can design yachts.

Upon our arrival on the mud-flats we disregarded, for the time, all the attractive forms so invitingly strewn about, and spaded up the whole area in search of mud-worms. We met with no success, however, and finally gave up digging. The flats seemed like a highly-cultivated garden as the sun shone on them, the brightly-colored animals standing out in bold relief against the dark mud, while more somber forms gleamed in the sunlight, reflecting tints even brighter than their own. The bridge, in the background, gave one the idea of a regiment of soldiers drawn up in battle array, the ranks deep, and seemingly irresistible, while the rumbling of vehicles and horse-cars upon it in that still afternoon air of November, seemed like the roar of distant cannon. Meanwhile the tide crept slowly toward the sea, its eddies chasing each other about the piles of the bridge, and disappearing farther down, where the undisturbed water swept more swiftly on.

Great beds of mussels covered the whole flat, and their dark, confused masses were studded with brightly-colored star-fishes — genuine sea-stars against a muddy sky. These mussels furnish most of the food of a sea-star, for the latter is able to turn his stomach inside out, thrusting it between the valves of the mussel's shell, when opportunity offers, and digesting him without

taking the trouble to chew or swallow. The huge beds of mussels promised food enough for the star-fishes for a long time to come, for the little wedge-shaped young of the former lay clustered about the larger shells in the greatest profusion. In this garden of animals we looked for the sea-star's cousin, the sea-urchin, but did not discover him, and had to be contented with the fishy, though wondrous tale, told by one of the party, of crows carrying these spiny echinoderms into the air and dropping them on rocks, in order to break the shells, and so secure the flesh. The piles of the bridge were covered with fine specimens of hydrozoa, and we filled many a bottle with these curious and beautifully delicate little animals. They grow in colonies, and when expanded in the water give the effect of little branching trees. On this account they were called, not long ago, "zoöphytes," meaning "animal plants." The colony must be as busy as a bee-hive when at work, for at the end of each little twig is a cup containing a minute animal, ceaselessly plying its tentacles in the hope of capturing prey. Fastened to the piles were great numbers of fleshy polyps, whose many tentacles formed a network encircling the mouth. There were forms producing jelly-fish, and others that increase by budding, but these animals are so delicate that we took only a few of the gayest-colored ones. Some collectors have been lucky enough to obtain sponges on the bridge; but we were not successful, handicapped as we were without a boat. The sponge that occurs there is a silicious form called *chelinula*, and which, from its peculiar branching, is sometimes called "dead man's fingers." So deeply were we absorbed in our work, that time had not seemed connected with existence, and it was only when one of the party, looking at his watch, shouted that a train would leave Beverly in a quarter of an hour, that we realized that night was coming on. We hurried to the cot at the draw, and each one taking a load, set off hastily toward the station. The last one to leave the little house grabbed all that remained, and rushed after the rest of the party with overcoats and a basket. We arrived at the depot together,

and, the train not being yet in sight, each identified his overcoat and claimed it. When every one had supplied himself, however, an extra overcoat remained, and the question was, "Whose is it?" We concluded it must belong to the man at the drawbridge, so we sent the thief back with the stolen article, to follow us to Boston when he could. The more fortunate and more honest remainder boarded the train, which was already in the depot, and rapidly bowled along toward the Hub, dreaming of cross sections, longitudinal sections, and injections which we were to make upon our victims on the morrow.

#### Sine Qua Non.

Sadly I sit on my empty trunk,  
And vainly, madly ponder;  
The rhyme I want is far away  
As the jewels of Golconda.

Forlorn was I when my board-bill came,  
But now, alas! forlorn,  
With every stitch that is fit to wear  
In the laundry around the corner.

Here's a bang-up poem I know will sell,  
Complete save the final passage—  
O hang it! That isn't the word I want;  
Will *anything* rhyme with sausage?

I. W. L.

#### The Poet Laureate of '87.

"Here's to '87!  
She is the crème de la crème."

TO the genius to whom we owe those deathless lines, G-l-s Ta-nt-r, P. C. S., this tribute is offered by one of his profoundest admirers. Rarely has the litterateur such an expansive subject to deal with. It is a delightful task to dwell upon the merits of such a poet as Ta-nt-r, as the many qualities which his poems possess offer such chances for contemplative research. There is no doubt but that he is the greatest expounder of the style in which he writes extant, and the vigor and symmetry of his productions are unequalled. It may be interesting to trace the events which combined to develop that poetic imagination. It was in

the country that our poet spent his earlier years. Communing with nature, growing up with the daisies, all the influences around him of a tendency toward fostering the poetic germ that was hidden in his soul, young Ta-nt-r thrived and blossomed into manhood. How he must have felt when he first was aware of his poetic powers! What a thrill of ecstasy as he composed his first verses, and trembled at his audacity! Alas! We of the common herd can never know the rapture of the soul when first expressing itself in verse.

Ta-nt-r was peculiarly fortunate in his choice of a place to cultivate his powers; for where but in Boston could he obtain the desired aid? His associates have been happily selected, as they are souls of a kindred spirit. To his mentor, Mr. — Ta-nt-r undoubtedly owes much of the terseness and beauty of expression so noticeable in all his work. This association with sympathetic minds, minds sensitive to all the higher influences, and who yearningly strive after the ideal, can but be of benefit in producing such thoughts as emanate from his fertile brain.

In the production of odes, Ta-nt-r shows how easily he can, by his masterful command of language, appeal to the feelings. When set to music and sung with a spirit, sung as the French sing the Marseillaise, in fact, sung as *he* sings them, the responsive chords in the souls of his hearers are touched instantaneously. Who could remain passive when hearing those stirring words,

"You can bet your boots  
'87'll never bust."

Few, indeed, are they who could listen unmoved to such animated utterances!

But it is not alone in the ode that we find this sincerity and truth. It is rumored that a work is in progress which will surpass all that has been heretofore accomplished. A grand epic poem after Milton's style is what is promised us. We would caution Ta-nt-r from following Milton too closely, as there is such a superiority in his own style. Perhaps he will show us how he can adapt a style to himself so as to improve it,

by lending to it, his own personality. Our best wishes to the Bard of Keene; and if he should show some new powers and make a new success, we will take new pride in the thought that we know such a genius, and are associated with him.

### A Valentine

DEAR MAIDEN: You know 'tis an Arabic saying  
That there are four things whose return no one's praying  
Can ever procure; and the "word that is spoken"  
Comes first on the list;—unmistakable token  
Of what we poor mortals would give all creation  
*Not* to have said on that special occasion,  
But which, having said, we find to our sorrow  
Can scarce be explained or smoothed over to-morrow:  
The less if we have but a vague recollection  
Of just what remark met so cool a reception.  
So being myself in this painful position,  
St. Valentine's *feet* I invoke to my mission:  
'Tis fair that a fellow who slings darts around,  
For once on a mission of peace should be bound;  
Besides, being "up" on the feminine heart—  
Far more so than I am—his medical art  
Will sooner discern what corner is wounded,  
And what sort of remedy should be compounded.  
My hopes I intrust, then, to his intercession;  
Peccavi! I cry; I own my transgression—  
Whatever it is—with most abject repentance,  
And hope to escape with the law's lightest sentence,  
Since you must know well, fairest judge, how remote  
All purpose unkind was: so pray do not quote  
That old Latin proverb, as "Saltationis  
Amentia omnia non excusat" is  
A flexible rule not designed to be hard on  
Such foolish expressions we constantly pardon  
In every-day life; how much more when before us  
Flit beauty and youth, while the orchestra o'er us  
Pours billows of melody, lending romance  
To brighten the commonplace afternoon dance.  
Forgive the offender, forget the offense,  
Nor deem it a sign of complete lack of sense,  
Since reason at times bids each mortal farewell,  
As I now do you.

Yours sincerely,

X. L.

### Noticeable Articles.

THE *Fortnightly* for January opens with the first of a series of anonymous papers entitled, "Present Position of European Politics," by a writer who seems to be exceptionally well-informed. This one is on Germany, and the writer contradicts the generally received opinion that the death of the aged Emperor, which cannot now be far off, will be the

occasion of a great change in her policy. Here is a glimpse of two of the female actors in the drama of European politics: "The idea that the Crown Prince has any different policy from his father, and that this other policy will obtain after the old Emperor's death, will suffice, no doubt, to send up stocks in one country and send them down in another upon the news of the Emperor's death, and to form the foundation of endless columns of big type leaded leaders, but it has no foundation in fact. The Crown Prince, it must be admitted, intellectually speaking, is largely by his own will the Crown Princess (eldest daughter of Queen Victoria); but that most able lady, when she shares the German throne, must inevitably have for her policy the Bismarck policy, the strength and glory of the German Empire. The Princess Royal is an interesting figure upon the European stage, of whom, in a political sense, it is necessary to speak. She belongs to a family in which there are many able members. Her mother is, considering the pressure of detail in her daily life, one of the most able persons, king or queen, that has ever sat upon a throne. But the Princess Royal is in some respects the ablest member of her family, and in all respects the ablest member of the family except her mother. And the Princess Royal has that which her mother's perpetual hard labor upon limited and special work has necessarily kept from her—much deep reading, and great knowledge of literary and general affairs, which have made her as strong a Liberal in many matters as the Queen is a powerful Conservative. "The Crown Princess is not popular in Germany. The reasons of that unpopularity are on the surface. She has been the patron of reputedly free-thinking clergymen, and popular gossip has accused her of being a complete free-thinker. This makes her unpopular in some quarters. She has often turned German prejudices into ridicule, and this makes her unpopular in others. She is very clever—a quality which in courts makes princes unpopular with fools. She is somewhat learned, which everywhere makes people unpopular with the ignorant." This glimpse of the daughter is interesting, but we never remember to have seen before so high an estimate of the respectable but sharp-tempered old lady who sits on the English throne, and goes through the motions of governing. Her Majesty's published writings would incline one to credit her with hardly more than the abilities of an ordinary school-girl, and we have heard that her favorite philosopher was Mr. Tupper.

The whole article is crammed with information, and is by a close and well-informed observer. No better way to pursue the study of practical politics can be devised than to supplement the systematic study of general principles with the careful reading of the discussions on the burning questions of the day as they are carried on in the best periodicals. They will be sure to bring out admirable writing. The interminable Irish question is a good example. The student need not feel bound to come to any definite conclusion; indeed, John Bull would undoubtedly give a liberal reward, and possibly bestow a peerage, on any reader of the TECH who will solve his Irish problem for him. But the study of such problems is most instructive, because the discussion is sure to be carried on by very able men. Thus there appeared, last summer, a very noteworthy book entitled "England's Case against Home Rule," by Prof. Dicey. Prof. Dicey is Vinerian Professor of English Law in the University of Oxford, and author of an admirable volume, recently published, of "Lectures Introductory to the Study of the Law of the (English) Constitution," which the present writer takes this opportunity to recommend to all students of the United States Constitution, on the principle, which he considers a sound one, that there can be no thorough understanding of the principles of our own Government without an equally thorough understanding of that of the mother country from which it is descended.\*

Prof. Dicey's book is a clear and vigorous argument against Home Rule, and, of course, it could not fail to elicit replies. The ablest man who followed the fortunes of Mr. Gladstone in the recent split of the Liberal party was Mr. John Morley, and, in the *Nineteenth Century* for January, he gives the first part of his answer; while in the *Contemporary*, Canon Mac Coll, another prominent Home Ruler, gives his. There is a passage in this last paper which forcibly represents the helplessness of Parliament under the present burden of its labors: "In ordinary circumstances, Parliament sits about twenty-seven weeks out of the fifty-two. Five out of the twenty-seven may safely be subtracted for holidays, debates on the Address, and other debates, apart from ordinary business. That leaves twenty-two weeks, and out of these, two nights a week are at the disposal of the Government,

and three at the disposal of private members; leaving in all forty-four days for the Government, and sixty-six for private members. Into these forty-four nights Government must compress all its yearly programme of legislation for the whole of the British Empire, from the settlement of some petty dispute about land in the Hebrides to some question of high policy in Egypt, India, or other portions of the Queen's world-wide Empire; and all this amidst endless distractions, enforced attendance through dreary debates, and rapid talk, and a running fire of cross-examination from any volunteer questioner out of the 600 odd members who sit outside the Government circle. The consequence is, that Parliament is getting less able every year to overtake the mass of business which comes before it."

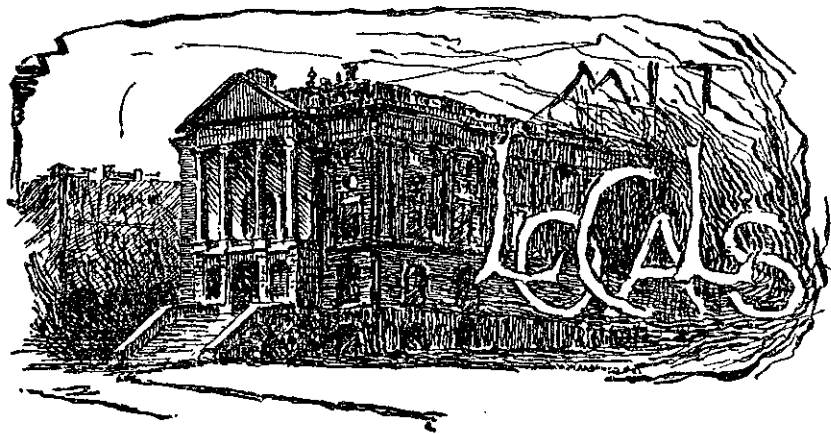
One would think so, and the truth is, that the main difficulty of the Irish question is, that it is only the burning part of two much larger questions which concern the whole Kingdom; namely, the land question and the general question of local self-government. Mr. Goschen has said, "There is no labyrinth so intricate as the chaos of our local laws." Whoever would form some idea of it, can consult the excellent little volume on the subject by Mr. Chalmers, in the "English Citizen" series.

One difficulty in the study of the Home Rule question is, to understand exactly what the phrase means. Prof. Dicey enumerates four distinct and different meanings. Mr. Matthew Arnold, in a paper in the *Nineteenth Century*, entitled "The Zenith of Conservatism," defines it as "A separate Parliament for Ireland, with an Irish executive responsible to that Parliament," in which shape he does not think it likely to be granted. Another difficulty is, amidst the cloud of interested and partisan misrepresentations, to ascertain what the real state of Ireland is. Sir Arthur Hayter helps us somewhat in the *Fortnightly* by an interesting account of a recent tour through the West of Ireland; while Mr. Healy makes a contribution from the Irish side, in the *Contemporary*, by a rather bitter paper entitled "Jubilee-Time in Ireland."

With the advent of the new year two new magazines have appeared,—a new *Scribner's*, on this side of the water, and *Murray's*, in London. Students of social science will be interested in our President's paper on Socialism, in the first; while the magazine of the great house that first published Byron's poems, opens appropriately with some new *Byroniana*.

W. P. A.

\* To this might be added the still more recently published "Law and Custom of the (English) Constitution," by Sir William Anson. The two books supplement each other.



There are only four regular miners in '88.

The advanced German class are reading Faust.

The Architects are holding a grand exhibition of all their drawings.

President Walker is giving the fourth-year Generals a course in Finance.

Professors Runkle and Osborn have been confined to their homes from illness.

President Walker has been elected President of the American Statistical Association.

The Biologicals have learned how to dissect a Welsh rarebit.

Mr. F. W. Ranno, '89, has been initiated into the Sigma Chi Fraternity.

The Freshman drawing-room is now supplied with stools.

A very successful blast-furnace run for lead was recently finished in the Mining Laboratory.

Fourteen Freshmen are said to have "accepted lucrative positions" at the end of last term.

Several of the Senior Mechanicals recently visited the National Tube Works, at East Boston.

Gen. Walker has been elected President of the New England Delta Kappa Epsilon Association.

The Sophomore miners have a broader course in surveying than formerly, and are taught more mine surveying.

The college editors will dine at Young's on February 22d. About twenty papers will be represented.

Papyrographs have reappeared in the form of notes on Assaying. Papyrographs must — "strike the gong, Maria!"

The Freshmen class has a correspondent of the English High School *Record*. It is said that "Babyhood" is also represented.

The four class societies held their meetings on the same night last week. TECH students were pretty well represented at the hotels.

An '88 Chemist recently asked for some kerosene to build his fire in the Assaying Laboratory. "His little soul to the angels flew; Boo-hoo!"

The Sophomores feel pleased that the Freshmen have shown their appreciation of '89's taste by choosing the same air for their class song.

The Society of Arts met at the Institute last Thursday evening, and listened to a paper by Mr. Dwight Porter on the water power of the United States.

A committee from the State Legislature visited the Institute last week. It is expected that a report favorable to an appropriation will be made.

Mr. Francis Goodhue, '90, has been obliged to give up his studies, on account of trouble with his eyes. We hope that he may be able to return next year.

A "Crib Club" is the latest thing with several students rooming on Chandler Street. The indications are that there will be some good sparring at the in-door games.

The S O F<sub>4</sub>, a society which was organized by the Freshmen after their foot-ball victory over '89, recently dined at the Tremont House. Twelve new members were initiated.

An '88 Miner was asked if he didn't think "King Solomon's mines" very improbable? He replied that he couldn't say, as he had not gotten that far in his mining lectures.

The '87 miners start on Thursday on a thirty-six hours blast furnace run for lead. The ore is an argentiferous galena.

The receptions given by Mrs. William B. Rogers to the Juniors, on February 4th and 9th, at her home on Marlboro Street, will be pleasantly remembered by those who attended.

The Hammer and Tongs Club dined at the Hotel Vendome last Saturday night. The new initiates, Messrs. French, Gannett, and Craigin, '89, made their *début* before a critical audience.

Supeating parties at the American Opera are very popular with Freshmen and Sophomores this week. We understand why the papers spoke of the well-drilled warriors in Lohengrin.

The Society of '88 had a very successful meeting last week, and passed a most enjoyable evening. Everybody present took part in the entertainment. Mr. Collins story was especially entertaining.

The winter indoor games will take place in about three weeks. Several events will be open to the Harvard and other athletic clubs, so our athletes should begin training at once and not let the outsiders capture the prizes.

A fondness for naps in the waste-basket is evinced by an '89 Mechanical. His new book, "Dreams in a Waste-paper Basket," will soon be out, and for sale at the drawing-room. For copies, apply to B-sf-rd, '89.

The 2G Society held a regular meeting at the Thorndyke, February 9th. Mr. E. C. Means read a paper on the Blast Furnaces, which the Miners visited last year on their excursion with Prof. Richards. Discussion of the supper followed.

The Appalachian Mountain Club met, February 9th, at the Institute. Professor Crosby read a paper on "Elevated Potholes near Shelburne Falls." It was announced that a winter excursion to Williamstown, Mass., would leave Boston, February 19th, for a four-days' trip.

The Society of '89 met at the Quincy House last Friday evening, with a good attendance. The dinner was well spiced with *entrées* in the form of marons. After the tables were cleared the members were entertained by songs, banjo selections, and by stories which had been approved of by Deacon LaRose.

The Society of '87 met at the Tremont House last week. It was decided to give a professor's evening next month, when the members of the Faculty will be entertained. The Society also proposed making the April meeting a ladies' meeting, similar to the one given two years ago. After the lunch, Mr. Lane read an account of a dream experience, and a round of stories were told by the members in turn.

The Society of '90 sat down to an initial dinner at Parker's, last Friday night, with a large attendance. The elaborate *menu* was gone through with the spirit of eagerness peculiar to such occasions. The festivities were continued to a late hour, with the result of depleted ranks at the drill next morning. The following officers were elected: President, A. M. Woodman; Vice-Presidents, W. Coffin and G. F. Weld; Secretary and Treasurer, H. B. Roberts.

The class of '87 held an important meeting last Saturday, which lasted two hours. It was decided to hold the class dinner March 25th, at Young's or the Victoria. Messrs. Shepard, Harris, Sears, Sprague, and Spaulding were elected a committee to select the toast-master and make arrangements. The class decided to co-operate with the Society of '87 in entertaining the Faculty, and the Executive Committee were authorized to act with the committee of the Society. The main business was in connection with the class-day exercises. After discussion, the matter was left to a committee of fifteen, who are to make every effort to eclipse all previous class-day exercises. The committee are as follows: Shepard, Fish, Sears, Curtiss, Spaulding, Harris, Sprague, Peters, Thompson, Gay, Hadaway, Draper, Kendall, Thomas, and Cobb. The meeting then adjourned.



Owing to the sickness of the Exchange Editor, this column was unattended to last issue. We thank the *Lasell Leaves* for their kind notice, and shall endeavor in the future to keep from such debilitating actions. If our sister collegiates see anything medical or feverish about our jottings, will they please put it down as the physician's fault, as we have done?

The *Era's* budget deserves more than a passing notice, not only on account of excellent material, but its decided college character. "The Genesis of a Cornell Song" we would call particular attention to, as a move in the right direction, in placing the authorship of all college effort. Diogenes is modernized in a bright, witty and effective manner, not to say classical. "Cornelliana" deals somewhat in "chestnuts," though, we are happy to say, as yet only at retail.

\*A tabular form of study for the present term is given in the *Yale Courant*, that it might be well for the Faculty of the Institute to look over. It appears that the Psalmody of David is to be revived, with its instrumental accompaniments—the harp, the sacbut, and the dulcimer. Tobogganing is classed as a new feature, and, we doubt not, will be largely attended, notwithstanding the doubtful wisdom shown in the selection of text-books. The authors are standard, however, though ancient, and judging from previous history, are competent in all matters pertaining to the slide. The editorial matter is prominent for subject-matter and style, and the contributions, both prose and verse, are inviting and original.

\*Shadrack, Meshack, and Abednegro. Edition 4004 B. C. Pub., Nebucheneza & Co.

Colby has again gone forth to battle with vigor, if not discretion. The echo of its doings, however, sounds Lilliputian and childish beyond the immediate field of conflict.

### THE COLLEGE WORLD.

HARVARD.—The expenses of the University, according to the annual report for the current year, were \$626,899.80, while the income was \$688,218.50.—One of last year's graduates is on the stage, while another is engaged at a salary of two dollars per week.—Two hours per week in the gymnasium is required of the two lower classes.—The Gun Club is trying to arrange a shoot with the Cornell Gun Club.—The expenses of the Athletic Association were \$2,300 for the past year.

YALE.—The Sheffield Scientific Department catalogue contains the names of 297 students and 29 instructors.—The first rowing-weights used at Yale were placed in 12 North College, in 1858. They consisted of open bags of sand fastened to ropes that passed over two pulleys. The crew rowed twenty minutes daily; and during the last three or four minutes of each pull, the captain stood by with a tin cup and filled the bags as rapidly as possible, to produce the effect of the spurt (*Ex.*)—The holiday tour of the Glee Club was very successful.—The Yale crew are getting along *swimmingly* on their new tank.—The average price per year for a room at Harvard is \$145; at Yale it is less than \$90.—The Yale orchestra consists of seven violins, two violoncelli, one double bass, two flutes and one trombone.—Sliding-seats in college boats were first introduced by Walter Brown, '70.

PRINCETON.—An exceptionally fine engraving of President McCosh is the frontispiece in the February *Century*.—A Yale Sophomore and a Junior are writing a novel, so they say. It will be published next spring. The scene is laid in Princeton!—The senate system inaugurated by Amherst has been introduced.

The inter-collegiate regatta between Cornell, Bowdoin, Brown, Pennsylvania University and Columbia, will be rowed on the Fourth of July, and will take place either on Lake George or Saratoga.

LAFAYETTE has never received a legacy.

JOHNS HOPKINS UNIVERSITY.—President Gilman was formerly President of the University of California.

AMHERST.—The course in English Literature will be omitted for a time, the trustees having been unable to find an instructor in that branch.—The Freshman nine have accepted a challenge to play the Harvard Freshmen soon after Easter.

DARTMOUTH.—Dillon, '89, Dartmouth's famous pitcher, who was offered a large salary to pitch for the Burlington nine, perished amid the flames at the recent railway accident at Hartford, Vt. A large body of students attended his funeral at Springfield.

TUFTS.—The Foot-ball Association is over one hundred dollars in debt. A small weekly assessment is declared, by which it's hoped the debt may soon be canceled. The Faculty have decided that absence from recitations lowers a man's marks.

LICK UNIVERSITY.—The remains of James Lick have been placed in a niche in the foundation of the Lick Observatory, on Mt. Hamilton, Cal.

COLUMBIA.—There are twenty-five candidates for the Freshman crew.—During the first week in January two successful plays for the benefit of the University crew, were given by a number of students.—A mass-meeting in the interest of base-ball was recently held.

TROY POLYTECHNIC.—President William Greeley is dead.

The Oxford-Cambridge race will be rowed over the usual course (Thames, near London), this year, March 26th.

VASSAR.—It only costs the young lady students \$25 per capita, per annum. Does this apply leap year?—A new gymnasium, to cost \$20,000, is soon to be erected.



THE DIFFERENCE.

*Girl*: "Ain't that your fadder coming?"

*Boy*: "No; it's your own!"

*Girl*: "How can you tell?"

*Boy*: "'Cos your fadder takes up both sides of the street, and mine lies down in the middle."—*Life*.

THE FRANCO-GERMAN VIEW.

There is a place that Ingersoll

Is certain don't exist;

And if it don't, we're certain that

It never will be missed.

But if it does, why what of it?

It can't our comfort spoil:

We Teutons and we Frenchmen quite

Enjoy a festive broil. — *Life*.

DO YOU?

*Miss Chillingly*: "So, Mr. Robinson, you kept a diary for four whole years, and then gave it up!"

*Mr. Featherstone Robinson*: "Ya-as. And it's weally quite interwesting to look it ovah, and see what a fool I was then."

*Miss Chillingly*: "It's a pity you gave it up. Only think! In ten years you might read it over and see what a fool you are now!"—*Life*.

*The Tangent Galvanometer*.—*Prof.*: "By reading this angle, gentlemen, we may determine the strength of the current. Let me see—in the present case it appears to be about eighty—eighty"—Chorus of expectant Juniors: "Eighty-eight?" *Prof.* (sarcastically), "O no, gentlemen; not quite such a small current as that."—*Brunonian*.

"Why is the wicked student like a sky-rocket?"—*College World*. We've seen a dozen answers, but in our opinion the reason why a wicked student is like a sky-rocket, is, because he will scintillate at night.—*Newark Courier*.



FACT!

*Humane Senior.*—"Hic. S-S-SHAME T'KEEP THE OWL S'NEAR LIGHT."

A tom-cat sits upon a shed,  
And warbles sweetly to its mate:  
"Oh! when the world has gone to bed,  
I love to sit and *new till late.*"

But while this tom-cat sits and sings,  
Up springs a student mad with hate;  
He shoots that cat to fiddle-strings—  
He also loves to *mu-ti-late.* —*Cynic.*

It was a Vassar girl just graduated who inquired: "Is the crack of the rifle the place where they put the powder?"—*Ex.*

A boy who will feign cramps about school-time is indulging in champagne.—*Life.*

THE ARTIST'S PLT.

A charming young Latter-Day St.,  
Thought she'd like to be taught how to pt.;  
But her *première étude*  
Was a statue quite nude,  
So she straightway fell down in a ft.

—*Pennsylvanian.*

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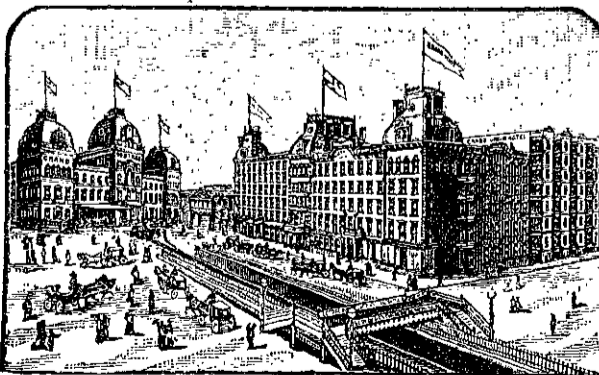
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#### Along the St. Lawrence.

[From the New York World.]

All quiet along the St. Lawrence to-night,  
Except now and then a cashier  
Is seen, as he crosses, with gripsack in hand,  
And imagines a cop in the rear.

All quiet along the St. Lawrence to-night,  
No sound save the rush of the water,  
While amateur warriors, curled up in bed,  
Are dreaming of horrible slaughter.

"All hail to this snow-covered alien shore,"  
Quoth the boodler, disporting a plug;  
"Far better the sweep of the boreal blast  
Than a bed in the circumscribed jug."

"But, alas! for the fellows who lingered too late;  
We think of 'hem ever with pain,  
For they lost the rich spoils of municipal war,  
By waiting too late for the train."

Was it the moonbeam so suddenly bright?  
The starlight so wonderously flashing?  
Ah, no; 'twas the glint of the glimmering glass,  
And the cocktail is ebbing and splashing.

All quiet along the St. Lawrence to-night,  
Though the cashier is crossing forever!  
While depositors rush on the bank which he left,  
He draws on the bank of the river.

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-11-

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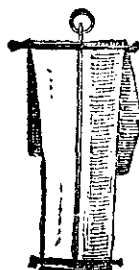
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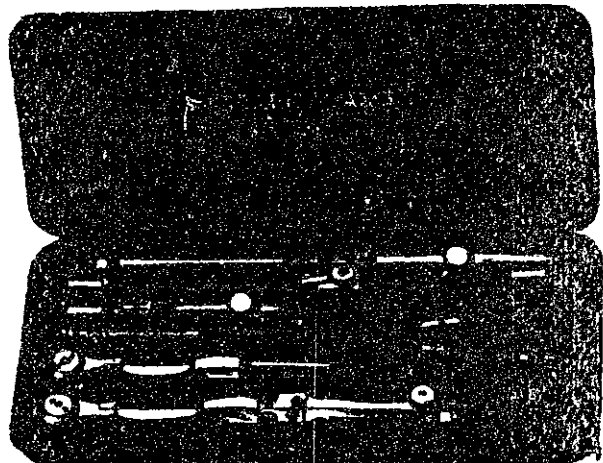
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