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THE TECH.

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WE have before us the Seventeenth Annual Catalogue of the Institute. It has the same general form as its predecessors, but differs from them in some particulars. Its most prominent feature is the large list of students, there being three hundred and ninety names. In the last two years the total number of students has increased forty-four per cent. This increase is most flattering to the management of the school, and is a mark of the growing popularity of this institution. The increase would undoubtedly have been greater had it been possible to obtain more ample accommodations for the Lowell School of Practical Design. The number of students in the Institute proper has increased, in two years, fifty-one per cent, and the number of specials sixty-three per cent.

Another prominent feature of the new Catalogue is the establishment of three "general courses." They are intended for such students "as may not intend to adopt a distinctly scientific profession, yet desire to obtain an education through studies of a predominantly scientific character." The elective course and the course in science and literature are not continued. The other courses, with the exception of civil engineering, remain substantially as before.

The Catalogue gives notice that in June, 1883, the admission requirements in algebra will be the same as those adopted by the New England Association of Colleges.

One other change, of a minor character, will be interesting to students. Former Catalogues set forth that "the drill hall contains a well-equipped gymnasium"; but in the present issue the word "well-equipped" has been omitted. We are glad to have even this assurance that the needs of our gymnasium are known.

Graduation day occurs Tuesday, May 30, and the next school year will begin Monday, Sept. 25.

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 publications. 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.

WE regret to say that events beyond our control have compelled us to withhold the portrait of Prof. Runkle until next issue.

Contributions.

Mexico vs. Guatemala.

MR. EDITOR, — Perhaps a few words about the recent difficulties between Mexico and Guatemala, and the position of the United States as a mediator between the two republics, may not prove devoid of interest to the readers of THE TECH. The history of Mexico is almost entirely unknown to the great majority of the American people; indeed, Americans are much better acquainted with the history and customs of nations beyond the seas than with those of their next-door neighbor and sister republic, Mexico. It is incredible to what an extent Mexico is unknown to Americans. Why, in 1876, a friend of mine, an attaché of the Mexican Commission to the Centennial Exposition in Philadelphia, was asked, by an intelligent American, why the Crown of Mexico was not represented at the Exposition. Many questions of the same tenor have been addressed to me. But perhaps Americans will say that Mexicans are fully as ignorant of the history of this country. It is so, as far as the masses of the people are concerned; but when we come to the middle classes and upward, we will find Mexicans better informed as regards the histories of the two republics.

The most general knowledge of Mexico up to quite recent times was something like this:

Somewhere, way down in equatorial regions, where the palm, the olive, and the orange trees grow in abundance, and where the sun ever shines, there is a country inhabited by a people who are always engaged in cutting each other's throats, and those of the unfortunate foreigners who chance or dare to wander that way. Others, of a more romantic nature, would substitute: There is a country inhabited by dark-eyed maidens, and men who ever go wrapped up in their *serapes* and under their wide-brimmed *sombreros*. Others, who had more pretensions to historical lore, would assert there was once a man by the name of Santa Ana, who was ever engaged in *pronunciamentos*, and who had a wooden leg.

On the other hand, a common idea of the United States, among the masses of the common people in Mexico, may be such a one as this: Away off in the far north is a country inhabited by *gringos hueros*, who drink a great deal of coffee and eat much ham. Or perhaps they know of the existence, in times gone by, of George and his little hatchet. All such preposterous ideas can be but detrimental to both nations, and no effort should be spared to bring about a better knowledge of each other.

But never, for an instant, would one imagine that such a prominent man as the ex-Secretary of State could be so little posted in the history of a country with which the one he represents is on such intimate terms of friendship, as revealed by the international correspondence between the heads of the State Departments of Mexico and the United States, through their respective ministers, concerning the boundary troubles of Mexico and Guatemala.

Any one who is acquainted at all with the history of Spanish America, under and after the Spanish dominion, might have known better than to assert, as Mr. Blaine has in his instructions to Minister Morgan, that Mexico's claims to the disputed territory of Chiapas and Soconusco date back only from the unfortunate and ephemeral reign of Iturbide. It is quite evident that Mr. Blaine gave such instruc-

tions and made such assertions under the information given him by Señor Ubico, envoy from Guatemala, to solicit an interference by the United States. Had Mr. Blaine taken the pains to investigate the other side of the question, no doubt historical facts would have loomed up before him that would have prevented him from placing himself and his government in such a ridiculous position.

The answer of Señor Mariscal, Secretary of State in Mexico, is stamped with dignity and patriotism. He answers courteously, yet in a tone indicating his decision to stand by and keep intact the honor and dignity of his country. He says his government does not doubt the good intentions of the government at Washington, in trying to mediate and settle amicably the troubles between Mexico and Guatemala; but that as the American government seems to know nothing of the origin of the troubles, and Mexico is positive that right is on her side, his government most gratefully declines to accept the mediation of the United States, and will see for itself that Mexico has fair play.

Such an answer was based upon these facts:

Before the year 1821, the territory now embraced by the republics of Mexico (and of course California, Nevada, Utah, Arizona, New Mexico, and Texas) in North America; Guatemala, Honduras, Nicaragua, San Salvador, and Costa Rica, in Central America, Chili, and other of the South American republics, was all under the government of Spain; they were all Spanish possessions. Mexico proclaimed its independence from the Spanish yoke on the 16th of September, 1810; and very soon after, the Central and South American colonies imitated her example. The independence of all these colonies was acknowledged at about the same time by Spain. The Central American colonies formed one republic; Mexico formed another. The inhabitants of the districts of Chiapas and Soconusco at this time, being entirely independent, petitioned the government of Mexico to be included in the Mexican domain, which petition was granted.

Guatemala has claimed these districts, after the division of the one republic into the five before mentioned; but has ever tried to show its right to them in a sneaking and cowardly manner, often taking advantage of our internal political troubles. Mexico has repeatedly invited Guatemala to settle the question amicably, by appointing a commission, composed of competent engineers from both republics, to survey the true boundary line; but the government of Barrios has always shrunk back from all fair and honest investigations of the subject. It tried to influence the government at Washington to interfere, and certainly succeeded in placing it in a most ridiculous position. However, Guatemala has found out that Mexico is resolved to keep its honor and dignity intact; and according to the latest information on the subject, has most humbly given up its claims, and yielded to Mexico the disputed districts of Chiapas and Soconusco.

Y. B.

Stained Glass.

I. — ITS MANUFACTURE.

IN treating of the subject of stained glass, it naturally arranges itself under four heads: its manufacture, its history, its use in windows, and its modern aspect. These headings will furnish the subject matter for the four articles which will appear in alternate numbers of THE TECH. I shall endeavor to make the articles as popular as possible, avoiding all scientific terms except where the chemistry of its construction renders it unavoidable; but even here I will try and make the simple reactions which take place plain even to the uninitiated.

Generally speaking, all glass is a compound of sand and some alkaline salt. Sand, or oxide of silicon, has the chemical symbol of SiO_2 , meaning that in each molecule there are two atoms of O, or oxygen, to every one of Si, or silicon. An alkaline salt is a salt of any one of the basic metals, such as sodium, potassium, lead, tin, etc.; meaning by a salt a compound of one of these metals with some other element and oxygen. The carbonate of sodium, for instance,

one of these alkaline salts, contains in each molecule two atoms of sodium (Na_2), one of carbon (C), and three of oxygen (O), having for its chemical symbol Na_2CO_3 . When the sand (SiO_2) is mixed with the sodium carbonate (Na_2CO_3), and the mixture heated, the sand combines with the sodium and part of the oxygen of the carbonate, making sodium silicate (Na_2SiO_4), setting free carbonic acid (CO_2). This sodium silicate, or soda glass, is a vitreous substance, and although not colorless and transparent, may be taken as a type of glass in general. Although we say that glass is a silicate of some one of the basic metals, and speak of sodium glass, potassium glass, lead glass, etc., this is never the case in practice, all glass being a mixture of these different silicates in varying proportions; the silicate of the metal from which we name the glass usually imparting to it some marked characteristic, or else having the predominance. Ordinary white window glass, for example, is a mixture of the silicates of sodium and calcium. In the majority of cases the colors of stained glass are due to the particular silicates they contain, and not to staining proper, which is only used for ornamental patterns in yellow on white glass, and is applied to the surface in the following manner: A solution of nitrate of silver is mixed with some such substance as chalk, and the mixture applied with a brush. The piece is then heated to a dull red heat in a "muffle." The nitrate of silver is reduced to an oxide which stains the glass yellow. In this country and in England the colors are obtained by mixing the silicate of the metal which is to impart the color with the others in the pot; and hence all the colors obtained in this way are known as "pot-metal colors." In France, and on the Continent generally, however, enamelling the glass is much resorted to. When we speak of glass being the result of the combination of certain metallic salts with silica, we must remember that the resulting silicate is really a product of the combination of the metallic oxide and silica; the salt being used only as a carrier, so to speak,

of the oxide. This being the case, if we fuse with colorless glasses certain metallic oxides, they impart to the resulting silicate their distinctive color. Many metals form two or more oxides, some containing more oxygen (actually or in proportion to the metal) than others, and differing from one another essentially. Such is the case with iron and copper, — the protoxide of iron (FeO) imparting a green color, while the sesquioxide (Fe_2O_3) imparts a yellow of a slightly brownish tint. Of the oxides of copper, the suboxide (Cu_2O) imports a red color, and the protoxide (CuO) a green. Black oxide of manganese, if used sparingly, renders the glass a delicate purple tint; if, however, it is present in too great quantity, it makes it perfectly black. Sesquioxide of chromium gives an enamel green; while oxide of uranium produces an opalescent effect of yellow with a tinge of green. In coloring with the oxide of gold great care has to be taken, as this, if used in at all large quantities, like the black oxide of manganese, turns the glass entirely black. In small quantities, however, it produces a delicate pink. When a deeper shade is required, the oxide is not added in the pot; but a salt of gold and a salt of tin are precipitated, forming a substance known as the purple of Cassius. This is melted down with some glass, the result of this operation being put in a pot with some white glass; and after sufficient heating, the whole is blown out into a sheet, which, if broken after cooling, will be seen to be white in the middle, with a thin coating of ruby red, known as a flashing, on the outside. The oxide of cobalt yields an intense blue. Tabulating these, we have the following: —

Suboxide of copper, } Red.
Gold flashing, }

Protoxide of iron, } Green.
Protoxide of copper, }
Sesquioxide of chromium, }

Oxide of cobalt, Blue.

Black oxide of manganese, Purple.

Oxide of uranium, } Opalescent yellow
and green.

Peroxide of iron, }
Oxide of silver } Yellow.
by staining,

G. T. S.

Superheated Ice.

THOMAS CARNELLEY, in *Nature* for Feb. 10, 1881, gives an account of a series of experiments made by him upon ice at low pressures. In this article he claims to have heated ice as high as 180° C. without melting it. The pressure during the heating was kept below 4.6 mm., this being the tension of its vapor at the melting point.

At the suggestion of Prof. Rogers, I began a series of experiments to confirm or to disprove Carnelley's results. As an account of the work done and the apparatus used would be very long, I shall confine myself principally to the results obtained. The apparatus used consisted of a flask containing about 500 cc., a barometer tube about four feet long, and a thermometer. Around the bulb of the thermometer was frozen a cylinder of ice, the water being previously freed from air by long boiling. The thermometer and barometer tube were passed through a rubber stopple, and inserted in the flask, which was filled with mercury at a temperature below 0° C. The whole apparatus was then inverted, and after a Torricellian vacuum had been formed in the flask, the barometer tube was melted off, and the ice left in a hermetically sealed space. The flask was placed in a freezing mixture of ice and salt, and the projecting neck of the flask adjacent to the cylinder of ice heated with a blast lamp.

The following was the invariable result: First, the ice, which had fallen in temperature to about -10° C., became heated to 0.0°, but in no case above this temperature; second, its volume very sensibly diminished; third, when the temperature 0.0° was attained the ice began to melt, unless the application of heat was discontinued.

It will be seen that these experiments go to disprove Prof. Carnelley's results.

A. C. W.

The Lowell School of Design.

THE last exhibition given by the pupils of the Lowell School of Practical Design was so successful, many of the patterns being beautiful as well as novel, that a brief history of the school may be interesting at this time.

Previous to the year 1872, all designs were either bought in England and France, or designers were brought to this country at enormous expense.

Mr. Little, agent of the Pacific Mills, having a firm conviction that Americans could, with instruction and application, compete successfully with the foreigners then employed, proposed to Mr. Lowell to found a free school for this purpose, open to both sexes. After due consideration, and being assured that manufacturers would employ capable American designers, Mr. Little determined, with the aid of Mr. Charles Kastner, to make the trial. Mr. Kastner at this time was designing at the Pacific Mills, where he had won quite a reputation.

Brought up as he was in the atelier of his uncle, M. Jean-Baptiste Lebert, in Paris, one of the most famous designers of his day, he was conversant from early youth with all the methods of the French school of design, and the selection could not have been better.

Thus the school started amidst the sneers of designers, and the grave doubts of the manufacturers as to its ultimate success; and to-day, after ten years, not only holds its own, but it may truly be said to stand at the head of institutions of this kind in America. The number of graduates is seventy-four, many holding responsible positions at our large mills.

Designing for prints seems to receive the most attention, Brussels carpeting next; and among the designs in the last exhibition were several fine wall papers, dados, etc. The rooms occupied by the school are cramped and inconvenient, and the need is greatly felt of larger ones. Already the desks are all occupied, and applicants are obliged to propose their names a year in advance to gain admission.

Another department was added in 1877, en-

abling students not only to design, but also to weave the same. There are now five looms, and Mr. Crompton, of Worcester, has recently kindly presented another. The designs shown from this branch are excellent, notwithstanding the difficulties with which the weavers have to contend.

It is hoped that before long a suitable building may be erected, sufficiently large to accommodate both departments. Should this hope be realized, a still greater success in the future of the school is assured.

Iron and Steel.

THE progress in the iron and steel industries of this country, as shown by Mr. Swank's report to the Census Bureau, is such as to excite more than ordinary interest. Not only has the annual production nearly doubled since 1870, but the capital invested and number of hands employed have increased in nearly the same proportion. This branch of manufacture has been one of the first to feel the necessity of adopting more certain and accurate methods than those dependent on a rule of thumb, and to employ scientific men, many of whom are eminent in their professions; and its success seems to show that scientific knowledge is of practical value, and is appreciated by business men. A writer in the *Boston Advertiser*, reviewing Mr. Swank's "Report on the Production of Iron and Steel in the United States," says: "How far our technological schools have helped, and how far they compare on the whole with similar establishments in Europe, is somewhat a matter of speculation, — only this being certain: that the demand upon our best technological schools is constantly and increasingly in advance of the supply. A graduate who knows the science of iron and steel, and possesses ingenuity as well as a willingness to work, becomes at once an object of desire on the part of furnaces, bloomeries, puddling establishments, and steel works."

A large number of graduates of the Institute are now employed in the leading iron and steel

establishments; and the constant and increasing demand for students of this and similar institutions seems to clearly show that they do exert an influence and are practically successful. In this branch of industry there seems to be abundant opportunity for our engineers and chemists to work up specialties; and with a constantly growing business, it is more than probable that by careful study and honest work, with a few years of practical experience, they will at last be able to command good salaries, if not to attain eminence in their profession.

G. A. M.

The Title of a Great Work.

WE take pleasure in giving publicity to the next great work of Gen. Daniel Pratt, the travelling encyclopædia and universal genius, the library of facts, the original oratorical author, the great favorite of the students of all the colleges, the greatest pedestrian in the world; been talked of for the mayoralty, the governor, member of Congress, and the President of the United States for the last twenty years; the general of generalities, the harmonizer of the laws of the solar system, the only value of knowledge and wealth of the universe of worlds, *non terra sed cosmos*.

Following is a synopsis of the contents of the work: Mark the March of Intellectual Developments of Mind. — The Great American Travelling Luminary. — The Perpetual Repeating of Immutable Images. — The Medium Criterion of all Professions of Men. — One Thousand Billion Dollars Address. — The Sun the Saver of Savers of All the Properties of Life. — The Vocabulary Laboratory of the Universe of Ideas. — The City of Chelsea, Mass., the Medium of the Ingenuity of the World. — The Law of Necessity the Law of All Laws. — The Solar Systems are not One Thousand Millionth Part Developed; a Vast Field for the Observation, Investigation, and Reflection of the Students of all the Colleges in the World. By the Editor, Author, and Orator Daniel Pratt, the Great American Traveller, Boston.

Mechanical Engineering.

THE civils' society is extremely secret; both its members and aims are unknown.

The mechanicals of '83 have begun indicating in the steam laboratory. Industrial chemistry, three lectures a week, has also been added to their labors.

Eighty-two will hereafter use Weisbach's Mechanics in connection with hydraulics.

The '83 mechanicals are taking a special M. E. course with Prof. Whitaker. The text-book at present is Forney's Catechism of the Locomotive.

All books belonging to the civil department have been collected, and will shortly be systematically arranged and catalogued.

At the last meeting of *S. M. E.*, Mr. Bryant, '83, read accounts of a number of boiler explosions.

A half-day excursion to Lawrence and vicinity has been suggested.

Steam compression of fluid steel, at a pressure of eighty to one hundred and fifty pounds, is attracting attention in England. Under this process the ingots are turned out free from porosity, and with a perfectly level top.

Drawings are now being prepared in Washington for the hull of a steel steamship which is to be four hundred feet long and sixty feet beam, calculated to make the trip from New York to Liverpool in five or six days. The vessel is to carry engines of 15,000 indicated horse-power.

In the shops, '82 are chipping and filing, '83 finishing steel forging, and '84 on turning and pattern-making.

'83 are at work on original designs in connection with boiler and engine construction.

The new condenser for the laboratory is to be purchased by a committee appointed by the government.

Mr. Cutler, '81, will have charge of the '83 mechanicals in connection with their work on the Corliss engine.

Department of Architecture.

THE Art Museum problem (as it has come to be called) was due on Monday, the 6th, and the *loggia* on Wednesday, the 1st. An extension of one week, however, was granted on both.

This being Renaissance year, Prof. Clarke's historical lectures on Tuesday and Thursday afternoons are devoted to the buildings from the fifteenth century down to the present day.

Two problems were offered this year for the thesis: a new building for the Institute, or a church the size of Trinity in Romanesque or Byzantine. The latter has been chosen by all three of the regular Seniors.

In the beginning of the winter, some mention was made of a series of lectures on ornament, the decorative arts, etc., to be delivered in the department by outsiders. It is now well into the second term, and the mention of the fact that there was to be such lectures is the last we have heard of them. Without wishing to take the authorities to task, we would suggest that if the scheme has not been abandoned it is time some move was made in the matter, as the end of the term will be upon us before we realize it.

Mr. Millet's lectures on costume, which were given last winter at Union Hall, under the auspices of the Lowell Institute, will be continued this winter at the Art Museum, under the auspices of the Art School. The students of the Art School and of the department will be admitted free, subject to a possible assessment of \$1.75. This year the subject of Etruscan costume will occupy most of the time. A living model is always present, on whom Mr. Millet drapes the various garments which come up during the course of the lecture. The lectures are delivered on Wednesday afternoons at two o'clock, and at their close the model will pose for an hour or more for those who wish to remain and sketch.

In General.

VACCINATION is no longer considered an excuse for absence from drill, — so says the General Order.

Spring begins March 20.

Senior, quizzingly: "Got your proofs?"

How about that Freshman paper?

Our adjutant has lost something. No reward.

Examinations have begun again with '85. Trigonometry this time.

All of '82 are provided with theses, except the civils.

A chiropodist is a man who stoops to corn-cure.

X. says he would n't marry a Lowell Institute girl. No designing young women for him.

One of the picture committee of '82 is so absent-minded that he made an appointment for the photographer, dated Feb. 30!

One of our Freshmen is so conscientious that he took off his "siders" immediately after signing the temperance pledge.

"A relic of barbarism," said he, as he sorrowfully fished a red hair from the depths of Smith's green soup.

Two new balances have been placed in the weighing room. They are of Becker & Son's manufacture, and were much needed.

The Faculty of the Rensselaer Polytechnic has appointed members of the alumni to solicit subscriptions for an endowment fund for that institution.

One of the '82 civils is so infatuated with Prof. V. and his assistant that he contemplates coming next year as a special.

The lecture before '85 on the manufacture of wines, malt, and spirituous liquors was brill-

iantly illustrated by samples of absolute alcohol and fusel oil.

Who says THE TECH takes no interest in athletics? A Freshman inquired the other day if we knew when the prize fight between Gilbert and Sullivan was coming off.

The architects of '82 are so aristocratic that they don't work at the Institute, but do their drawing at home. The miners and chemists envy them, but unfortunately the laboratories can't be transported.

Mr. White, '82, has been experimenting on the use of thermometers at high temperatures. A mercurial thermometer was heated for about a week, in an oil bath, to 280° C. As a result, the zero point was raised about 5°.

A Soph was very much surprised at not being able to obtain a precip. with nitrate of silver in what he supposed to be a solution of common salt. More thorough examination proved the solution to be pure distilled water.

A deluded Soph recently offered to bet a Junior that he was studying political geography under Prof. Niles, and nothing but the invitation to "put up or shut up" could shake his belief. Even now Billy thinks he is studying that subject, but will not risk his lucre on it.

The young ladies and Mrs. Richards recently agreeably surprised and highly honored the '82 miners. They paid a visit to the mining lab. to see the work of concentrating the lead ore (galena) of Mr. Ross. The method was a "very beautiful" one, and we hope the ladies thoroughly understood it. If they had given notice, a collation might have been served.

The Institute has recently been blessed with more than its share of attention from Dan'l Pratt, G. A. T. Three lectures have been delivered in the gym. The first — on "Æstheticism" — was replete with flattering references to local celebrities, and closed with a glowing tribute to the three graces of modern civilization, "æsthetics, peripatetics, and hysterics." His second oration was on "Man the Repre-

sentative of Two Images," and his third was entitled "The Safety of the American Government." The General found an opportunity to visit the office of THE TECH, and gave a glowing description of his forthcoming "Encyclopaedia." The language of the General was taken down by our reporter, and will be found in another column.

We are glad to learn that certain Freshmen are taking steps toward the establishment of a class society. Its objects will be the promotion of friendly feeling among the members of the class, and the encouragement of debates and literary work. Such a society is needed, and would doubtless do much good. We trust that all Freshmen who are approached on the subject will give it their support.

Prof. Clarke has instituted a new method of practical instruction, which promises very well. A number of buildings in process of construction are selected, and two or three men assigned to each. These men inspect their building, noting any peculiarities of style or construction, and return a written report to Prof. Clarke.

A Midnight Episode.

The world was softly sleeping,
When up young William rose, —
Stole with soft step into the hall,
The while he dons his clothes.

"Now," quoth the bashful William,
"This night makes me a man:
No more shall they be wreathed in smiles
Who do my visage scan."

He hies him with light footsteps
To the chamber of his sire;
He soon returns: his bosom burns
With joy's exultant fire.

No more young William hides his face;
No more his heart is sad;
No more, — for he has shaved him
With the razor of his dad.

Exchanges.

IT is amusing, oftentimes, while looking over a pile of exchanges, to note in how many of the papers a favorite poem or bit of humor will be found. The average college editor seems to be completely at loss for original fun, and eagerly seizes upon the few really mirth-provoking items in the columns of his brighter brethren, and — usually giving due acknowledgment, to be sure — hastily inserts them in his own columns, to be copied by others until the joke becomes a source of endless exasperation to the much-suffering Ex. Ed, and as dull and pointless as an account of a reportorial interview with the Wilde. To make the matter worse, it is not always the good joke that is hardest used; for the taste of some contemporaries seems to run in curiously perverse channels, and the older and more musty the article, the better fit is it considered for their readers. Probably, not being proud, they regard what was good enough for their ancestors as sufficiently facetious for them. Some jokes have a perennial life, and reappear at stated intervals, after the fashion of the annual joke in the humorous professor's lecture, — at which, however, the duly warned class never laughs. Poetry does not escape the mill, short humorous verses especially being obliged to run the gauntlet of the entire press; and only after prolonged agony, mercifully ended at last, are they decently buried in the depths of the dust-covered exchange file, forgotten if not forgiven.

The *Journal of Commerce* of Feb. 25 contains an article that is worth the attention of every young man who has his own way in the world to make. It is of special application to the students of such an institution as our own, where all our work is expected to tend toward some definite end, and prepare us for a particular department in the business of life, that we may hereafter fill our position, whether high or humble, in such a manner that the world shall

at least not lose by our life work. The advice given to every worker, whatever position he may be occupying, is to *be independent*: "We mean independent in a perfect knowledge of your chosen vocation, independent in understanding that whatever you are intending to do, you are able to do, and do it well. Every man who undertakes to be master of a trade should be so completely master of it that he can understand every crook and turn that can reasonably be expected to appear to him, in whatever condition his business may be, or in any condition that might arise. . . . It will be seen, if a man only thinks for a little while, that he must devote himself entirely to something. He cannot take up every now and then with some new thing; he cannot branch off into the sciences and master very many of them in the space allotted to a single lifetime, and be of any great consequence in any of them or in his attainments. . . . If a man will be something, he can be. It is hard work to become well known, or to be known as capable or trustworthy; but there are very many who take an easy road to be nothing, and they accomplish their purpose with a vengeance and a completeness worthy of a better cause. It remains for a young man to choose whether he *will* be or *will not* be; and too much importance cannot be attached to 'I will,' only it must be followed up closely and until success comes out of it."

Whatsoever a man seweth, that shall he also rip. — *Ex.*

"We are happy to announce that a perfectly safe elevator is in process of incubation." Do you mean that it is in the hatchway? — *Ex.*

A Western editor informs his readers that "Œdipus Tyrannus" is a very interesting little musical drama in Greek, written for Harvard students by two of the professors, Sophocles and Paine. — *Ex.*

Tutor in German: "No, that is wholly wrong. Well, translate the next stanza." Student (trans-

lating): "I have failed. Mark me well, if thou canst." — *Yale.*

It is proposed to make the course in the Yale Scientific School four years instead of three. By the will of the late Joseph E. Sheffield, the institution will come into possession of nearly half a million dollars. — *Ex.*

Prof.: "How dare you swear before me, sir?" Student: "How did I know you wanted to swear first?" — *Ex.*

Soph., to sleepy room-mate: "Come, S., why don't you get up with the lark as I do?" S., grimly: "Been up with him all night." — *Ex.*

The University of Berlin now has over four thousand students, and it is feared that the laboratories and lecture-rooms will soon be found insufficient to accommodate them all. There are forty-three societies of various kinds among the students. — *Ex.*

A poem of one hundred lines is required of each student before graduating at Trinity. — *Ex.*

A Romance.

A winter night,
A pretty face,
A dress of marvellous construction;
A white cravat,
A black dress suit,
A friend who makes the introduction.
A parting late,
A winning smile,
"I hope that you will come and see me";
A faded flower
Held in his hand,
Which makes him look extremely dreamy.
A summer camp,
Of birch-bark white,
Pitched on a lofty, lovely mountain;
They took long walks,
And read long books
Together by the springlet's fountain.
At home again, —
But tell me, fates,
What makes our hero look so wilted?
The truth is sad
And hard to tell:
He's wooed the maid and has been jilted.

Acta.

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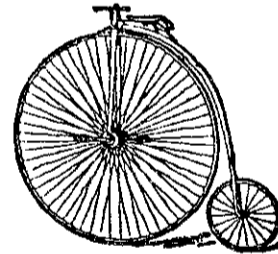
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