THE DOMAIN OF ELECTRICITY

Progressive Strides of the Modern Power in All Departments.

IMPROVING SPEED OF OCEAN CABLES

Utilizing Waste Electricity—Cost of Niagara's Power—A Profitable Field for Lawyers—Electric Stables and Locomotives.

Soon after submarine telegraphy became a practical success it was discovered that the wire used for that purpose would not work as well as a land wire. With the best transatlantic cables only from twenty-five to thirty words a minute can be transmitted intelligibly; on land the only limit is the skill of the operator or the speed of an automatic machine for transmitting, which latter often reaches 200 or 300 words a minute. The difficulty in cabling, long considered insurmountable, is due to the fact that an ocean wire has an insulating coat of gutta-percha, and this develops on its outer surface a certain amount of negative electricity, by induction, every time that positive electricity is sent into the wire.

Now, if there could be devised a way to reduce the "electrostatic capacity" of the cable, says the New York Tribune, less current would be absorbed and more would be delivered for effective use at the end of the line. Dr. M. I. Pupin of Columbia college, whose original investigations of electrical phenomena for the last two or three years have attracted wide attention, now proposes such a method. He would introduce into the line, at frequent and regular intervals, these very instruments to which reference has just been made, namely, condensers. The current sent into the first of these sections would not pass into the second, since the two sets of plates in the condenser would be insulated from each other. But a secondary current would be induced in the interposed instrument, and this would traverse the next section. Thus each portion of the line would act upon the one beyond it, so that electric action would still be manifest at the terminus as if there was a continuous conductor. One result of this arrangement would be that the electrostatic capacity of the cable as a whole would be limited to that of any one of those sections, and hence reduced to almost nothing, and that energy-absorbing phenomenon of "line" induction would be avoided. The signaling service would be performed through the inductive action of the condensers proper, and these would purposely have ample capacity, greatly exceeding that of the wire sections.

At each junction in the line a short side track or shunt would be put in and made to include an induction coil of enough resistance to refuse to take the main current so long as the condenser was in working order. But if the latter should break down, no other route would be open, and the current would then flow through the coil into the next section.

The condensers for submarine use, says the originator of this system, would not be the large boxlike instruments seen in laboratories, but small cylinders, or rolls of ribbonlike plates, wound about the core. About twenty of them, arranged an inch or two apart along the wire like beads, would, he says, give the required capacity. They need not have a cross section greater than that of an ordinary cable. These groups ought to be introduced at intervals of several miles for Atlantic service, and Dr. Pupin thinks that such a cable might be constructed for only twice the cost of those now in use. On a longer line, say across the Pacific, it would be desirable to put in a proportionately larger number of groups of ribbon condensers. It has been said, at the beginning of this article, that with machines (such as the Wheatstone) 200 or 300 words a minute may be transmitted over land lines by telegraphy. Over a short circuit (of a mile, for instance) such apparatus would transmit 600 words a minute, says J. C. Kurkel, one of the Western Union electricians in New York City. Certain conditions incident to a long line make it desirable, if not necessary, to reduce the speed. To Chicago 200 words a minute is an average rate from New York; to St. Louis, 175; to Boston, perhaps 300 words might be sent. But Dr. Pupin thinks that his system would make it possible, both by land and sea, to transmit 500 or 600 words a minute. As yet, however, no actual test has been made on long ocean cables.

UTILIZING WASTE ELECTRICITY.

There are so many trolley cars in Brooklyn that it takes an enormous amount of electricity to run them. It necessarily follows that a great deal of the electric fluid is "grounded." Consequently every street in which the trolley runs is completely saturated with electricity. The grounded current doesn't stay in the track at all. It darts off in every direction, and as a general thing makes for the water and gas pipes that are buried beneath the pavements. The pipes become charged with electricity and of course if they are tapped properly the current can be utilized. That is just what a number of Eastern district people have done, and that is why they are congratulating themselves that they are able to keep the temperature in their stores 'way down in the 60's all summer long, without any expense save the oil that they use on the electric air fans.

"Yes, I am glad we have the trolley," said a Broadway merchant to a reporter of the Brooklyn Eagle. "It gives us rapid transit and it saves me a lot of money. Last year I paid out quite a sum to keep cool. This season it won't cost me anything."

"How is that?" asked the reporter.

"Well," said the merchant, "I don't know as I ought to tell you newspaper fellows, for if the thing gets into the papers I may lose the 'cinch' I have now. However, it is something every one ought to know, so here goes."

"You see that air cooler," continued the merchant as he pointed to a rapidly revolving electric air fan. "Well, it don't cost me a cent to run that. You might say I steal the electricity, but then you know I wouldn't do that. You see the entire street in front of my store, and, in fact, in front of all the stores where the trolley runs, is saturated with electricity. Now I, like several others, have taken advantage of this condition of affairs. One of the wires from that electric fan runs down to the gas pipe in my cellar. The other is attached to the water pipe, and here I have the negative and positive poles, and, of course, the circuit is formed. You can see for yourself that the current is sufficient to send the motor of the electric fan around at a lively rate. Now, that motor is a 1-12-horse power, but I am sure the current is strong enough to run a 3 or 4-horse power motor. But, then, that doesn't bother me, for I am not in the manufacturing business, and all I want to use the electricity for at present is to keep cool this summer. I may, however, run a sewing machine with the current. Yes, the trolley is a great thing and I am glad the people of Brooklyn have got it."

The reporter traced the wires from the electric fan to the cellar and found that they were attached, as stated, to the gas and water pipes respectively. The reporter also discovered that the waste electricity is being utilized in a couple of saloons and in a jewelry store. In every case the wires are simply attached to the gas and water pipes.

"If I wanted to," said the man, "I could run machinery that requires 4 or 5-horse power. All I would have to do would be to drive a couple of gas pipes right up to within a few inches of the track and I would be able to get all the power I needed. It wouldn't be stealing the electricity, either, you know."

NIAGARA'S WATER POWER.

A lively discussion is going on among electricians on the subject of the long distance transmission of Niagara water power. Early in May there appeared in a leading electrical journal an article in which Prof. E. J. Houston and Mr. A. E. Kennelly went elaborately into the question of how far the water power of the falls could be transmitted by electricity. The gist of their contention was that the power of Niagara falls can be transmitted to a radius of 200 miles cheaper than it can be produced at any point within that range by steam engines of the most economical type, with coal at $3 per ton; furthermore, that given a sufficiently large output, it might be commercially advisable to undersell large steam powers at twice this distance with no profit in order to reduce the general expense upon delivery nearer home." The article attracted wide attention, not only among electrical engineers, but also in lay circles, and was promptly noticed by newspapers throughout the country. Dr. C. E. Emery, an eminent engineer, replied to the article by a series of figures and statistics which went to show that Messrs. Houston and Kennelly had overestimated some of the points on which their conclusions were based, and underestimated others. For instance, the Houston-Kennelly estimate regarding the cost of the hydraulic works is $17.60 per horse power, as against Dr. Emery's $140 per horse power. The former quote Prof. Forbes, the electrical engineer of the Cataract company, as testifying that "there can be little doubt that the efficiency of our dynamos may reach at least 98 per cent," and they commit themselves to 96 per cent. Dr. Emery holds that the efficiency of the 5,000 generators will be only 90 per cent. He also makes an estimate which puts the cost of operation higher and the efficiency of transmission much lower than those of the first estimate. He does not believe, in fact, that power can be economically transmitted to Buffalo in the present state of electrical engineering. He says: "Mills, paper manufactories, etc., requiring power for twenty-four hours, can be best located directly at Niagara falls and secure the undoubted low rates that will obtain there. It is thought that the first transmission installation, which will naturally be for Buffalo, will cost even more than estimated above, as time and some tentative work will be required before the application becomes general. The estimate makes no provision for subways, which must be constructed to all points reached. The cost may rise so high that even the transmission to Buffalo will pay only a small percentage on the cost, and conditions better than those assumed must be found before there will be much of a market elsewhere." To this Messrs. Houston and Kennelly have replied that their figures are correct from first to last, and they mean to stick to them. In regard to the efficiency of the 5,000-horse power generator, they say their own figure of 96 per cent is unjustifiably low, and that the efficiency of the Frankfurt-Lauffen plant, where power is transmitted over conductors to a distance of 10.9 miles, is 95.4 per cent, and the dynamo used in that calculation was only about one-twentieth of the capacity of those used at Niagara. Another combatant has appeared in Dr. Francis B. Crocker of Columbia college, who calls into question the Houston-Kennelly figures both in the matter of percentage allowed for annual interest, depreciation and repairs, and the cost of generators, motors and transformers, all of which, he says, are remarkably low. He thinks the estimates are not "conservative," as they are claimed to be, and that not enough margin has been allowed all around, and he questions whether "the cause of long distance power transmission will be helped by assuming the lowest possible costs and expenses and the highest possible efficiencies. It is proverbial that estimates should always be made with ample margin, and in nine cases out of ten it is absolutely required."

ELECTRICITY LAWYERS.

There has long been a marked tendency among lawyers to abandon the wide field of general practice and take up with "specialties," some devoting themselves to mercantile, others to accident, to corporation, to insurance, and to criminal cases.

Within a comparatively short time there has sprung up in New York, says the Sun, a class of practitioners known as "electricity lawyers." These are either young men, who, coming to the bar, find the field of professional employment crowded, or men of middle age, who, retained in cases wherein electricity figures, have become experts on similar questions.

The field is comparatively a new one, and there are few precedents to guide the lawyer. Electricity is, indeed, a practically new branch of law business, and as the matters in dispute are generally important, this branch of legal practice is quite lucrative. At the beginning of the present year, it is computed that no less than $1,000,000,000 was invested in the electrical industry of the United States.

This was divided as follows: Electrical light and power companies, $400,000,000; electric railroad companies, $200,000,000; telegraph companies, $150,000,000; electrical supply companies, $150,000,000, and telephone companies, $100,000,000.

The General Electric company has an authorized capital of $50,000,000, $35,000,000 of which has already been issued, irrespective of the large bonded debt. The American Bell Telephone company has an authorized stock debt of $20,000,000. The Edison Electric company has stock to the amount of $6,500,000, and bonds authorized to the extent of $5,000,000. The Westinghouse has $10,000,000 of stock, and the Western Union Telegraph company has bonds to the amount of $15,000,000 and stock to the amount of $100,000,000, exclusive of guarantees. Last year it transmitted 66,000,000 messages, maintaining 21,000 offices. The telephone company paid over $1,500,000 in dividends last year.

There are 500 electric railroads, having, as before stated, a capitalization of $200,000,000 and operating nearly 6,000 electric cars.

The protection of electric patents, a very large number of them new, is a very important branch of legal business at present, for large sums are paid for royalties where such patents are held intact, and suits for damages or infringements are many. There has been a great increase in the number of patents applied for in Washington for various electrical devices or improvements of late. The relations of the various electrical companies, too, have not been friendly, and taxing commissioners in various states and cities have disagreed about the valuation to be put on property in electric concerns.

All this makes a large amount of business for lawyers, and has developed a great amount of skill and knowledge among those who have applied themselves to this branch of jurisprudence exclusively.

NEW ELECTRIC LOCOMOTIVE.

There is an electric locomotive in course of construction in Boston which promises to meet all the requirements for propelling railroad trains. It is an 8-horse power machine and it is unique.

The distinctive feature of the invention is the substitution of a piston and cylinder in place of the usual rotary motor for the application of power. The cylinder is much longer than for steam purposes, and has in its interior a series of magnets. The piston passes entirely through the cylinder, is a series of armatures of peculiar construction. On the axle of the driving wheels are commutators whose function is to apply and cut off the electric current, just as the eccentrics control the steam of a steam engine. The principle of the machine is the admission of the current to the magnets in the cylinder, which are in advance of the piston rod, and by their action on the armatures the piston rod is moved forward. As the stroke is ended the current is cut off from the magnets first charged, and applied to those at the rear of the piston, giving it a reverse motion, thus maintaining a strong, regular motion. There is absolutely no back pressure from the electric current, while in a rotary motor this is estimated at 20 per cent of the force applied.

It is practicable to run the machine at 200 revolutions of the axle per minute, and with a driving wheel eight and a half feet in diameter and the crank pin three feet from the center there would be a six-foot stroke, under a full head of power. The machine is adapted to receive the electric current either by a trolley wire, a third rail in the track or from a storage battery.

Knocked Out of Time

By that able blood depurent, Hostteter's Stomach Bitters, the young giant, rheumatism, withdraws, beaten. In maturity it is harder to conquer. Attack it at the start with Hostetter's Stomach Bitters, and save yourself years of agony and constant danger, for this malady is always liable to attack the heart. Potent in malaria, dyspepsia, constipation, nervousness and kidney complaint is the Bitters.

Switchback and carousal Courtland.

Bit of Detective Work.

Mrs. Yerger—Tommy, do you want some nice peach jam?

Tommy—Yes, ma.

"I was going to give you some to put on your bread, but I've lost the key to the pantry."

"You don't need the key, ma. I can reach down through the transom and open the door from the inside."

"That's what I wanted to know. Now, just wait until our father comes home."

One word describes it, "perfection." We refer to DeWitt's Witch Hazel Salve, cures piles.

Go to Courtland, cool, refreshing.

GROWTH OF AN OHIO IDEA

Phenomenal Success of the Famous Chautauqua Summer School.

THE APT UNION OF PLAY AMD STUDY

History of the Educational Movement Originated by Dr. Vincent—Preparation for Celebrating the Twenty-First Anniversary.

No other educational movement in modern times has compared in originality and in phenomenal success with that which is known as the Chautauqua assembly. It started modestly twenty-one years ago this summer, and for a time had its day of small things. For many years now it has been an influence of tremendous power in the educational and religious life of this country.

Chautauqua was an Ohio idea, originating in the fertile brain of Rev. Dr. John H. Vincent, who was then the Sunday school secretary of the Methodist Episcopal church, and has since become a bishop of that church. Rev. Dr. Vincent had for an intimate friend Lewis Miller, a leading and wealthy citizen of Akron, O., who was prominent in the Methodist church. Mr. Miller had long been an active Sunday school worker and had used his large fortune generously for that cause. Dr. Vincent used to spend much time at Mr. Miller's house, and between them the idea of a place of summer resort of Sunday school workers was evolved. They wanted a sort of vacation place where work and recreation might be combined, and it was Mr. Miller who suggested the utilization of the Methodistic camp meeting idea.

THE LOCATION.

Looking about for a place in which to start their work, says the New York Advertiser, they found at Fair Point, on the western shore of Lake Chautauqua, in western New York, what seemed to them an ideal location. The Chautauqua region was already noted as a somewhat popular summer resort, and had a few summer hotels and cottages. At Fair Point there was already an old-fashioned Methodist camp meeting ground, and this the promoters of the new enterprise proceeded to utilize. The first meetings, which were nothing more than a Sunday school camp meeting, in which the addresses and services were confined exclusively to Sunday school subjects, were eminently successful; so much so that measures were immediately initiated for the amplification of the idea. The National Sunday School association bought the entire eighty acres at Fair Point, and immediately began to erect buildings and make other improvements. The money of Mr. Miller was liberally given for the cause and other generous and wealthy Methodists came forward with contributions.

One of the first and most unique features that was put into execution the second year of the assembly, and that attracted attention to the enterprise the world over, was the model of Palestine, made in earth and rock. This was practically a reproduction of the topography of the Holy Land, and was supplemented by a large model of Jerusalem, a model of the Jewish tabernacle, a model of an Oriental house and a sectional model of the great pyramid of Cheops. In connection with these models appeared men and women in Oriental costumes so that the picturesqueness of the biblical country and biblical times were strikingly reproduced in tableaux vivant with lectures, essays and class instruction bearing upon the same subjects. This practical kindergarten feature of biblical instruction was such a unique idea that it made the success of the enterprise beyond question.

INTEREST EXPANDS.

The second year of the assembly saw an average daily attendance of nearly 6,000; on one day when President Grant visited the grounds, 20,000 people were present. New features were established, such as church congress, reform council and scientific congress. Before long the assembly was divided into several departments, ecclesiastical, philanthropic, scientific, biblical and Sunday school. Representative men of all religious denominations and of many phases of intellectual thought, eminent in the pulpit, on the platform and in educational work, were engaged year after year to lecture and to teach. From the outset in every department, and particularly in that of biblical instruction, specialists—bible students, learned Orientalists and experienced teachers—were engaged. Secular instruction was not neglected, and in nearly all branches pertaining to liberal education instruction was given scarcely inferior to that of the best colleges. In fact Chautauqua very soon became more of a summer university than a mere school or assembly. It was in effect an advanced school of specialties.

In less than five years Chautauqua has grown to be a village of 500 summer cottages, scattered over the 100 acres of wooded ground forming the assembly's property, that is hemmed in on two sides by the waters of the lake. As the years have gone on the cottages have taken on a more and more pretentious character, until many of them are really imposing buildings, while several hotels have sprung up in the neighborhood. There has grown up a large village, with all the elements of permanence in it, such as shops, postoffice, electric light, police service, etc. There is also a daily morning newspaper, which gives the news of the world as well as full reports of all the special proceedings of the assembly.

In the early days of this flourishing institution the duration of the annual convocation was only two weeks. Now, however, the sessions are held for two months of each year—July and August. The assembly has long since been incorporated and is managed by a board of trustees, with president and chancellor. The village has many handsome public buildings, a notable museum, and a reference library of considerable size and other characteristics of an advanced town life.

THE EXPENSE ACCOUNT.

The way in which the community is managed constitutes an interesting study in sociology. The village is open to any one who chooses to visit it, but every visitor, unless he is a noted preacher or lecturer who comes to serve the assembly, must pay for the privilege. Before he can get in he must purchase a card of admission, which gives him, as it were, "the freedom of the city," which includes the right not only of enjoying the municipal advantages, but also of profiting by all the free instruction and entertainment. There is a fixed tariff for these tickets of admission by the day, by the week and by the month, and it costs more to become a Chautauquan in August than in July. The rates for July are: One day, 25 cents; one week, $1; the month, $2.50; for August, one day, 40 cents; one week, $2, and the month, $3. You can get in for the entire season for an even $5 bill.

The daily program, to which every person who has purchased citizenship is entitled to free admission, includes a score of more lectures, concerts, dramatic recitals and other exercises, and special entertainment in the shape of unusually famous lecturers or concert singers in the amphitheater in the evening.

Besides all this, there is an extensive course of class instruction, which is divided into six departments. The Chautauqua college, for those who desire to study thoroughly and persistently during six weeks, offers instruction in ancient and modern languages, literature, history, natural sciences political economy and philosophy. The School of Sacred Literature provides several courses in bible study, both in the original languages and in English, on the leading biblical specialists. A pedigogical course for public school teachers includes instruction in psycology, pedigogical principles and their practical application to the teaching of arithmetic, geography, science, etc. There is a School of Music, teaching the theory and practice of instrumental and vocal music; a School of Physical Education for both sexes in all branches of gymnastics, athletic contests, rowing, etc., and other classes in art, photography, industrial drawing, china decoration, manual training, elocution and shorthand. Reasonable charges are made for instruction in these special departments, varying according to the character and the length of the courses.

REST AND RECREATION.

Life in Chautauqua partakes something of an easy, off-hand character, for the place has not yet altogether lost its camp meeting traits. Most of the people who go there have a very serious purpose, but the atmosphere of the place inclines one to rational rest and recreation, combined with the close application to mental and moral improvement. As to recreating, there is the hotel, where you can get the best that any one ought to have, except wine and liquor, and pay for it about what you would for the same things elsewhere. You can board in a cottage hotel at from $5 to $12 a week. You can hire a furnished cottage or furnished rooms, and some of the young women go into co-operative housekeeping at a cost of $2.50 or $3 per week. There is plenty of opportunity for wholesome indulgence and recreation, and tennis, baseball, bicycling, horseback riding, driving, rowing and even amateur theatricals are indulged in abundantly.

This year sees the assembly in a more prosperous and promising condition than ever before. Several new features will be seen for the first time. The Ministerial club will be established for the special discussion of ministerial work. The college will make a specialty of history, covering that particular field with exceptional thoroughness without neglect to the other courses in the college. The work of the Boys' club, which was organized last year, will be greatly expanded, taking in such subjects as natural science, camp life, fishing and other outdoor sports and studies. New methods and new courses of study will be adopted in several of the departments, such as the schools of Sacred Literature, the Teacher's Retreat, the American Institution of Christian Sociology, which met for the first time at Chautauqua last year, and the School of Physical Education.

But the work of Chautauqua has not been limited by its local habitation and its summer season. As an outcome of this idea there has developed one of the most influential movements that the world has ever known. The Chautauqua managers early realized that their peculiar plan of instruction demanded special text books, lesson papers and other accessories, those commonly in use at that time being in nowise adapted to their needs. As a result the assembly soon began to compile a literature of its own, beginning first with text books and lesson papers and periodicals of a more general literary character. One of the earliest efforts in this direction was the Chautauquan Magazine. The germ of this periodical was the Chautauqua Assembly Herald, which was published daily during the meeting and monthly from Meadville, Pa., for the rest of the year. Fourteen years ago the Chautauqua entered the field as a regular monthly magazine and jumped almost at once into an abundant and enduring popularity. It has now become a firmly established periodical with a distinguished list of contributors, and an individuality distinctly its own. The magazine has not alone been built up by the great educational movement whose name it bears, but it has also been a very large and essential factor in promoting that movement. It specially serves the interests of the Chautauqua assembly and other educational enterprises connected therewith, and the purposes and needs of that particular educational effort are naturally made dominant in the general scheme of the periodical. At the same time, however, the magazine takes high rank among the lesser literary periodicals of the day, while in circulation and influence, owing to its special character, it is scarcely second to any other. It is said to be a very valuable property, with a circulation of very nearly 100,000. To print it there has been established at Meadville, Pa., the Chautauqua Century Press, one of the most complete and modern establishments in this country for the making of books and periodicals.

The Chautauqua assembly has become possibly more widely known through the Chautauqua Literary and Scientific Circle than through any other medium. This circle had its origin nearly forty years ago. When Rev. Dr. Vincent was a pastor in Newark, N. J., he endeavored to establish a course of home study and reading for young ministers who had lacked early educational advantage, but the project never got beyond the stage of preliminary consideration. In 1878 Dr. Vincent felt that the time had arrived when it would be possible for him to graft this idea upon Chautauqua on a more extended scale than he had before contemplated, making it serve the needs of thousands of men and women all over the country. Thus it was that the now famous C. L. S. C. was organized.

A cooling ride—to Courtland beach.

PLAGUE IN HONG KONG.

Death Rate Increasing Daily and Much Alarm Prevails.

VICTORIA, B. C., June 24.—The steamer Sikh, thirteen days from Yokohama, has arrived and was subjected to a long quarantine inspection. All the effects of the Oriental passengers were fumigated. Advices report 577 deaths from the plague in Hong Kong from May 1 to June 7, 230 being under treatment. The total number of cases since the outbreak is about 1,200.

The Yokohoma Herald of June 9 says regarding the steamer Peru: "The following was issued by the Pacific Mail Steamship company this morning: Owing to the steamship Peru being placed in quarantine in Nagasaki her departure is indefinitely postponed. It is expected that she will leave that place June 14."

The Peru should have sailed from Peru June 12, but owing to a man having died on board enroute from Hong Kong she was detained at Nagasaiki for inspection, but was expected to leave earlier. The man was attacked at 4 o'clock in the morning and died during the night, being buried at sea.

On Thursday another death took place and the vessel will now have to undergo a week's quarantine. Had the Hong Kong officials taken the slightest precautions to prevent the plague from spreading to the colony or to isolate the first few cases which occurred it would have prevented much mortality. The new cases at Hong Kong average thirty per day, with a fearful death rate. The sanitary authorities attribute the outbreak not to bad sewerage, but to filth in the houses, which is piled there in carloads.

A British officer and three men are reported as attacked by the plague. The authorities believe that they have got a grip on the plague. In Canton, though the plague claims fewer victims than for some time, it is causing much loss of life. According to a Kobe paper thirty new cases were reported and twenty-five deaths occurred on May 29, on the 30th of May thirty-three new cases and twenty-eight deaths, and on June 1 fifty-nine new cases and fifty-four deaths.

MORE BODIES REMOVED.

Gradually Clearing Up the Dreadful Mine Disaster of Last Week.

CARDIFF, June 24.—The men who have volunteered to search the Albion colliery at Cilfyndt, the scene of the terrible explosion of fire damp last evening, have been at work all day, but no further rescues have been affected. All hope for those still in the pit has been abandoned. The number of the dead, it is believed, will reach 250. It has been ascertained that 267 men and boys descended the shaft yesterday, and of this number only seventeen have been saved.

A large number of bodies are buried beneath the earth-falls, and it has been found impossible as yet to extricate them. Those not killed by the explosion or crushed to death by the falling earth and rock were undoubtedly asphyxiated by the after damp. The scene of the disaster has been visited today by thousands of people from the surrounding country. There were recovered last night eighty-six bodies.

Late this evening the rescuing parties succeeded in extricating a large number of bodies. Thus far 142 bodies have been taken from the pit. A telegram from the queen says she was much shocked and expressed deep sympathy with the families of the dead.

VIENNA SOCIALISTS MEET.

Nearly Three Thousand Declare for Universal Suffrage for Austrian Workingmen.

VIENNA, June 24.—An immense meeting of socialists was held in the prater today, it being estimated that fully 2,500 people were present. The object of the meeting was to declare in favor of universal suffrage, which the Austrian workingmen have been agitating for a long time. The speakers urged that the agitation be continued until the demand was conceded. It was the intention of the anarchists to have a procession through the principal streets of the city, but this was prevented by a detachment of mounted and foot police.

Ellis' Case Still in Doubt.

MASON, Mich., June 24.—Up to late tonight the jurors in the forgery trial of Attorney General Ellis have made no report.

INDEPENDENT OF THE TARIFF

Wall Street Operations Are Not Based on the Bill's Probable Effect.

IDLE CAPITAL MUST SOON BECOME ACTIVE

Cannot Much Longer Be Held in Retirement as Investments Are Too Alluring—Banks Inclined to Help the Government to Gold.

NEW YORK, June 24.—Henry Clews, head of the banking house of Henry Clews & Co., writes of the situation in Wall street and the financial world as follows:

We are now within a comparatively few days of the final enactment of the new tariff bill. By the 1st of August its provisions are likely to be in operation, and the anxious problem of its effects will then enter the process of solution. It can hardly be said that Wall street shows any deep interest in the approaching event. It is not basing any present operations upon it; it is not discounting it as either a "bull" or a "bear" element. It does not deny that it must have future effects; but it regards those results as so contingent upon conditions independent of the tariff that they hardly afford material for speculation, much less for careful investment. It is conceded that the new act will remove the ostensible reason for suspense which has so long kept business stagnant. Wall street's attitude at the moment is a waiting one, so as to see how things will drift when the new conditions take effect. Some things will then have a certainty which they do not now possess. Prices of all kinds of products and of labor will be found to be very exceptionally low, and there will be no longer any questions of tariff to throw any doubt upon that condition of cheapness being more or less permanent. A state of exceptionally low values is always, when it is supposed to have touched the bottom level, favorable to investment. It is an accommodation to the reduced purchasing ability of consumers; it is favorable to the undertaking of new enterprises, to the repair and extension of industrial plant, to the purchase of real estate and the construction of new buildings; and it affords the best opportunity for undertaking large works of a corporate and public character. With the enormous amount of capital now held idle and yielding almost no return, it is hardly conceivable that these conditions of extraordinary cheapness can much longer fail to have their natural effect of forcing this unemployed wealth into investment. Its owners are not putting their means largely into existing stocks or bonds; it is therefore reasonably inferable that they are waiting for the ripe moment for investing in new undertakings created under the prevalence of low values. It is simply a question of ripeness of opportunity when values have touched bottom; when the general situation has lost some of its uncertainties; when the self-curative tendencies of depression begin to exhibit themselves, and the country has grown weary of idleness—then a few bold leaders of capital set an example of confidence to the conservatives, and a process of sure and rapid revival sets in. That process is now before us. How near or how distant it is not easy to judge. Nor is it easy to say how much nearer the end of the tariff confusion may bring it; nor how much it might be helped by the success of the diplomatic efforts now in progress for introducing European disarmament; nor how much it might be encouraged by assurances that congress will soon give us a currency system that will remedy the serious obstacles to investment connected with the present unsound state of our monetary arrangements. There are plenty of conceivable contingencies that might at any time start up a revival of confidence and of investment, but, at the moment, none are distinctly in sight, and we can, therefore, only wait for developments. This may not be a situation immediately favorable for a buying movement, but it certainly is not one that warrants selling. The favorable probabilities greatly outweigh the unfavorable ones, both in number and importance, and the prospective situation is one that will have no rewards for pessimism.

Wall street was taken somewhat by surprise this week by a meeting of bank presidents to consider whether the banks should not help the treasury in meeting the continued extraordinary demand for gold for export. As the treasury has already lost $40,000,000 of the gold it recently borrowed and the export movement may possibly call for another $15,000,000 before it is satisfied, this is not an inopportune question for the banks to consider. Confidence is still sensitive, and the experience of last year under similar conditions is not forgotten; it was therefore prudent to prevent any further unnecessary drains upon the government gold reserve, already reduced to $67,000,000. With $100,000,000 of specie in their reserves the banks can well afford to show this consideration for the treasury, and the more so as there is a reasonable probability that with the opening of the fall months a considerable amount of gold may find its way back to this country, thereby replenishing the reserves of the banks. We are now verging toward the season when the interior begins to draw money from this city for crop moving purposes. It is not improbable that those withdrawals may prove quite important. This suggests a probability of higher local rates of interest at a later stage, and that would be calculated to bring gold out of the present extraordinary European stocks of that metal.

MUST KEEP THEIR SWORDS SHARP.

Significant Expression of the German Emperor to His Marines.

KIEL, June 24.—Emperor William today addressed the marines now at this naval station. His majesty dwelt upon the significance of the entry of his son, Prince Adelbert, in the marines in a month so momentous in this their fatherland. The battles of Hohenfriedberg and Waterloo, and the death of Frederick the Great, he said, all occurred in the month of June. The emperor concluded by saying:

"Let this remind you of Hohenfriedberg and Waterloo, where the warriors of Prussia and Great Britain crushed their hereditary foe. To Frederick, too it was ordained to wield the German sword which laid low our enemy. Let it be your task to keep that sword bright and sharp, so that when I call you, which God forbid, you may stand fast, not only with honor, but with renown."

TELEGRAPHIC BREVITIES.

Domestic.

Five thousand people assembled at Island park, Winfield, Kan., to listen to Henry Watterson.

E. M. Abbot, a veteran Dubuque printer who had set type thirty-seven years in that city, died Saturday night.

R. G. Gulliner, a senior at Williams college, has committed suicide. He stood high in his class. The cause is unknown.

Employes of the Hammond, Whiting & East Chicago Electric railway Saturday night refused to haul Pullman cars. The tie-up lasted only a couple of hours.

The allotting agent for the Kickapoo Indians announces that the allotments have all been made and the balance of the lands can now be opened to settlement.

A terrific wind storm passed over Petersburg, Pa., Saturday night. The Presbyterian church was unroofed, the Methodist church blown down and one residence was wrecked.

Leo M. Brock, who travels for Weiner & Brock, clothiers of Buffalo, N. Y., has been arrested in St. Louis on the charge of obtaining money from banks over the country on false pretenses.

Foreign.

Reports from Peru show the revolution is spreading.

Slight earthquake shocks were felt in Greece Saturday.

Six Spanish anarchists have been arrested at Rio de Janeiro.

General Boxche is preparing a revolt in the Argentine republic.

The government fleet has entered the harbor of Rio convoying the late insurgent ship Republica. The Aquidaban is soon expected.

The latest news from San Salvador is to the effect the government is daily making additional charges against ex-Vice President Ezeta and are confident the United States government will see the justice of delivering him up.

The Italian Chamber of Deputies has adopted the first clause of the government's financial proposals. The Chamber also sustained the government in the matter of the duration of the contract with the Orleans & Southwestern railroad.

Elegant music tonight Courtland beach.

Soaking Rain Three Hours.

YANKTON, S. D., June 24.—(Special Telegram to The Bee.)—Copious rain fell all over this section of South Dakota and northern Nebraska last night, and as a result a half crop of wheat and oats may reasonably be expected, while an immense crop of corn is assured. Rain was sadly needed in this section for small grain. The storm lasted three hours, and rain fell in torrents during that time, unaccompanied by wind.

Summering of Teachers.

Miss Hutchison, principal Eckermann school, and Miss Salmon, principal Windsor school, will go to Asbury Park, N. J., and from there to Washington, D. C., during their summer vacation.

The summer destinations of other teachers are: Miss Ida E. Blackmon, Sheboygan, Wis.; Miss Ada Tobitt, Colorado Springs; Miss Minnie V. Moriarty, Dakota City, Neb.; Miss Jennie L. Redfield, Camp Lookout, Pries' lake.

PERSONAL PARAGRAPHS.

C. M. Swan of Sioux City is at the Millard.

J. J. DuBois of Denver is stoppping at the Merchants.

Judge Hamer of Kearney is registered at the Dellone.

J. B. Burkley, a banker of Stromsburg, is at the Arcade.

A. Berkman and wife of Oakland are registered at the Arcade.

J. Y. Rich and Joseph Knudson, Idaho cattle men, are at the Dellone.

Nebraskans at the Hotels.

At the Paxton—J. S. Adams, Genoa.

At the Murray—F. McAleer, Albion.

At the Mercer—S. M. Sheaff, H. C. Kayler and wife, Mrs. Nisbit, Mrs. Herst, Fullerton; A. M. Williams, Monroe; I. B. Lorneker, Madison.

At the Arcade—C. C. Voorhees, J. P. Wright, J. S. Purvianer, Norfolk; A. D. White and wife, St. Edward; J. D. Donovan, C. F. Husley, A. D. Wright, N. J. Bell, Madison; George Hudlow, A. E. Watt, C. L. Thompson, C. J. Heaton, Albion; A. G. West, Fremont; Tom A. Smith, Lincoln; Mrs. C. O. Jonas, Oakland; Henry Picotte, E. T. Timber, Bancroft; A. Reeve, Ord.

At the Millard—F. O. Stringer, Grand Island; Mrs. C. R. Evans, Miss Stella Evans, Rushville; E. C. Howe, Norfolk.

At the Dellone—W. L. Butler, W. F. Conner, Boone; S. O. Conley, T. M. Hoyer and wife, Norfolk; L. H. Vallery, T. Punnell, Platsmouth; James I. Rhea, Holdrege.

At the Merchants—J. E. S. Bell, Genoa; L. H. Boylan, G. W. Strong, C. C. Goodrich, Cedar Rapids; F. M. Sinclair, G. W. Campbell, R. N. McGee, J. T. Miller, F. S. Gay and wife, C. I. Gay and wife, H. D. Hughes, Fullerton; R. C. Regan, T. H. Regan, Platt Center; C. W. Brewer, A. A. Mansfield, O. H. Graham, H. A. Cline, F. Crotcher, B. Brader, Albion; H. M. Grinds, North Platte; M. Louitt, Guide Rock; T. H. Bethge, Fremont; W. A. Mann, Lyons; R. B. Gammel, Tekamah; Ed Farley, Bancroft; C. L. Lund, A. Nelson, Leigh; C. G. Murdock, Albion.

DeWitt's Witch Hazel Salve cures ulcers.
DeWitt's Witch Hazel Salve cures piles.

Slide for life, Courtland beach tonight.

"DELSARTE GYMNASTICS."

OAK PARK, MINNEAPOLIS, Minn., June 22.—To the Editor of The Bee: My attention has been called to an article in your paper on "Delsarte Gymnastics." My time is generally too much taken up with the public school teachers of our country to notice every article written at random, but as I sincerely believe Mr. Philip Andres writes with earnestness, and that his desire is the same as mine, to make strong men and women out of the children of today, I answer his letter in a broad spirit and a fraternal way.

It was the first time I was aware that anything called "Delsarte" was being taught in the Omaha schools. I had thought that an American system of gymnastics—to particularize, the "Preece system" of which I stand at the head—was being taught in the Omaha schools. The Preece system is not a new one, it being taught in the schools of fifty-three cities. It is the system taught in the State university of Minnesota, in the public schools of Minneapolis, of Pittsburg, Pa., of Rochester, N. Y., and is now being introduced in Philadelphia. I say it is not new. Of course, it is not 20 years old, but the change has been just as good from the system of 200 years ago as from the horse car of old to the electric car of today.

Had I seen good results, that is, practical results, from the use of the Turner or Swedish system in the public schools of our country I should not have had occasion to plan out my work. Having been a public school teacher of twenty-two years standing, and seeing the requirements of the narrow aisle and the desk, I formulated a system which, I am proud to say, some of the leading educators of the country have called the most practical for the school room.

In our public schools the child is at least one-half of the time writing at his desk and the other half he is sitting with book in hand studying. It has been my aim to reach these points, and not have exercises mean simply a going through of wonderful feats, but to watch the child carefully throughout the day and train the teacher that she may train the child to grow up straight and strong.

Mr. Andres is correct when he says there is no such thing as the Delsarte system of physical gymnastics, and I consider, as he does, the person calling his work such, a fraud. It would take too much time to enter into the detail of the philosophical side of this great question, and the psychological side of it is as important as the physiological. But, to be brief, the aim of gymnastic work should be, first strength, then rhythm.

The one point that Delsarte had in gymnastic work was the philosophical side, claiming that exercises should be strong and rhythmical, and the system is good when it abides by these laws, name it Turner, Preece, Ling, American, German or Swedish. I agree with Mr. Andres that if the pupils in the Omaha schools are simply striking attitudes, the work is a failure, but if the pupils are trying to sit straight at their desks, are in a correct position while writing, if they are taking movements each day to make them stronger and straighter, if the teacher is being taught to stand in front of them, straight and strong, they are doing well, even although the system is not called Turner.

There is a strong man at the helm in Omaha, Mr. Fitzpatrick, a man admired and looked up to by the educational world, and both Mr. Andres and myself are forgetting ourselves when we attempt to dictate to him any plan of work in his schools.

LOUISE PREECE.

Boating, bathing, music. Courtland Beach.