THE FIELD OF ELECTRICITY

Development of Electric Light and the Industries it Promoted.

EVOLUTION STARTED BY EDISON'S SKILL

Origin of Wireless Telegraphy is Traced Back of Marconi—Bathing in Electric Light and Its Curative Power.

About a year after Thomas A. Edison first announced to the world that he had solved the problem of how to economically distribute the electric current for lighting purposes by means of fine filaments made of carbonized threads of bamboo fiber inclosed in little glass bulbs from which the air had been exhausted, and was giving public demonstrations of his system at Menlo Park, N. J., a well known scientist published a paper filled with mathematical formulae intended to prove that the commercial success of this novel method of illumination was a physical impossibility. It was shown that under the most favorable circumstances conceivable the cost of lighting by the incandescent electric system was, and would continue to be, prohibitive. Meanwhile Edison went ahead in the perfection of his system by improving every detail. When he had accomplished this, says the Philadelphia Record, he found that he had unintentionally and unconsciously done far more; for his system of lighting soon developed the fact that the best stationary steam engines of that day (1878) were far from satisfactory, and as a result the high-speed engines which are now so generally used for running dynamos were invented.

It is probable that the output of incandescent electric lamps from two factories alone in this country now exceeds 11,000,000 bulbs per annum. In the early days of incandescent electric lighting, when the bulbs cost over $1 apiece, their life was uncertain. Sometimes they would stand 200 or 300 hours' constant use, but more often they would die in much less time. Now, when the lamps cost less than 20 cents each they are expected to last more than 600 hours, and, in fact, often do burn more than 1,000 hours before their life is exhausted. At first it required one horse-power of the steam engine to supply four little lights; now the same amount of power suffices for twice that number of lamps, and each lamp gives far more than twice as much light. Many millions of dollars have been invested in the business of making these lamps, and large dividends have been paid, in spite of the mathematical demonstrations of the scientist who predicted that Mr. Edison's invention would never be a commercial success.

Recent Improvements.

In the volume of United States Consular Reports for January, 1900, there may be found a report by our consul general (Mason) at Berlin, entitled "A New Step in Electric Lighting," which gives a lucid description of a new form of incandescent electric lamp. This lamp needs no vacuum, it has no delicate carbon filament; it gives a light so closely resembling sunlight that the most delicate shades of colored ribbons may be matched in its glow as well as in daylight; it gives out little or no heat, and it requires but one-half the power needed to supply the present form of carbon filament lamp. The source of light is a little rod (heated to incandescence by the electric current) made of refractory earths such as are used in the manufacture of the familiar Welsbach mantle.

This lamp is the invention of Walther Nernst. More or less vague amounts of its construction have appeared in technical papers in this country and the critics have generally condemned the invention in advance as impracticable and totally incapable of commercial success. In view of the former experience with the Edison lamp, however, and in the light of the admirable report of Consul General Mason, who explains the present deficiencies of the Nernst lamp quite clearly, it seems to us that the invention is one which is likely to prove of value. It may be accepted as an axiom that whenever a new discovery contains within itself the germs of valuable practical utility ways and means will be found, sooner or later, to overcome the obstacles which may prevent its immediate advance to commercial success.

Wireless Telegraph Before Marconi.

Like most great inventions or improvements in the arts and sciences, says a writer in the Engineering Magazine, wireless telegraphy is the outcome of the labor, not of one man, but of several. Let us see to what extent the way had been marked out for Marconi. He studied Hertz and Hertz studied Maxwell, who had Michael Faraday's experiments before him showing some sort of relationship between electro-magnetic waves and light. Hertz could not have overlooked Prof. Henry's discovery forty years before of the effect of an electric spark upon a distant needle.

James Clerk Maxwell, in 1873, after nearly ten years' investigation, published his famous mathematical equations establishing the law of identity of light and electro-magnetic propagation through the ether. Prof. Fitzgerald of Dublin has already affirmed his belief in the theory. Hertz proved this by actual measurement of the waves.

Prof. Lodge and others had experimented with wave transmission before Marconi came on the scene. The waves had been sent through walls and other obstacles, but the idea of using them for long-distance telegraphy, if thought of at all, was not seriously considered. Prof. Lodge says that nothing but "stupidity" prevented it.

Prof. Hughes, the inventor of the microphone, had discovered that a high-tension spark affected certain forms of his instrument at a distance, and claims to have been quietly planning a wireless telegraph for years before Marconi was heard of. Onesti, an Italian professor, had experimented with copper filings as a variable conductor, but it remained for Prof. Branly of the Catholic university of Paris to produce the "coherer," a working receiver for electro-magnetic waves transmitted through the ether. In this simple little device, not larger than two inches of lead pencil, coupled with the Hertz oscillator, Marconi saw his wireless telegraph, and proved the truth of Prof. Lodge's rueful remark that "nothing but stupidity" had delayed the wonderful achievement.

Bathing in Electric Light.

It has been found that there are many painful ailments which, when acted upon by electric heat and light rays, are completely banished from the sufferer's body, reports Pearson's Magazine. Strong electric light is thrown on to the seat of suffering, the patient basks in a bath of light and heat, experiencing nothing but pleasant sensations, and, in most cases, an immediate and comforting sense of relief from pain.

The apparatus which enables patients to bathe in electric light is extremely simple. To an adjustable stand are fitted two large copper or nickel-plated reflectors, which can be moved in any direction. If a patient is lying in bed, reflectors are placed on either side, adjusted to the exact position for locating the rays where desired. On the reflecting surfaces are the electric lamps, which radiate the luminous heat rays. The heat may be regulated by varying the distance of the reflectors, of the number of lamps, or by means of a special regulator which controls the electric current. Those parts of the body, such as the armpits or shoulders, which it would be impossible to treat locally with other arrangements, are easily dealt with by the new system.

When the patient is in the right position and is comfortably settled (he may be fully clothed or covered with blankets, without affecting the power of the rays), the current is turned on and heat and light of considerable intensity are immediately produced. In a few moments the thermometer will register 300 degrees Fahrenheit. I have seen patients chatting cheerfully and experiencing no inconvenience, while an affected limb has been exposed to heat rays at a temperature of 400 degrees Fahrenheit. It might be supposed that such a heat as this would roast a limb! Undoubtedly, there would be evil results were it not for the important fact that dry heat is employed, which evaporates perspiration as soon as it appears on the body.

Applying the Rays.

The baths usually last for forty minutes, or an hour, and it is to this prolonged application of the brilliant light and the intense heat, bearable under no other circumstances, that the marvelous results are mainly due. The rays may be applied in three ways. They may be directly applied to the body without heating the surrounding air; they may be partially screened, so that they fall only on one spot, as on an arm, or hand; or they may be diffused and caused to heat the air surrounding the patient. As a rule, better results are obtained when a complete body bath is taken, even when the ailment to be treated is only in one limb or joint.

The result of the bath is that a free perspiration breaks out over the whole body, even when the rays are applied only locally; at the same time the body temperature is raised as much as 1, 2 or even 3 degrees, a physiological effect hitherto regarded as impossible. There is an increased circulation of the blood, the pulse increases in frequency and also the respiration, but a few minutes after the bath pulse, respiration and temperature return to their normal or previous condition—while an hour later the pulse is found to be slower and stronger than before, especially in the case of patients with weak hearts. With painful affections the pain is almost immediately relieved on the application of the rays. After the bath the whole body is briskly rubbed with a dry towel and perhaps massaged and the patient rises from his bed a new man.

The peculiarity of the heat supplied by the electric lamps is that the rays require no medium, but may be radiated directly on to the body, even through a glass screen, or in a vacuum. The air surrounding the patient may be freezing, yet the body would still be warmed by the radiation from the electric lamps. In all other baths of a similar character air as a medium is necessary in applying the heat to the body.

The electric light rays so closely resemble the sun's rays that they will cause sunburn and freckles when directed for any length of time on the uncovered skin. This discovery is full of possibilities—no doubt there are slaves of the desk, who, when it becomes generally known, will take electric heat and light baths for the sake of gaining a complexion which may compare favorably with a yachtman's after a long cruise in the tropics.

SEAT CLEANING CONTRACT

Secretary Gillan Shows that the Various Propositions Were Received as Sealed Bids.

OMAHA, Feb. 7.—To the Editor of The Bee: I observe in reading the report of the work of the investigating committee today that your reporter has confused ordinary communications to the board with sealed bids, in speaking of the seat-cleaning contract for 1900. I do not think it intentional, but I desire to have the matter set right before the public.

I desire to state that the proposition for the seat-cleaning and varnishing contract let in December, 1899, had nothing to do whatever with the contract held by H. H. Boyles last year, under which so many seats were cleaned. Mr. Boyles' contract was let in December, 1898. The Board of Education has never asked for bids on seat-cleaning and varnishing, neither in 1898 nor 1899. Propositions to clean and varnish seats have come in from time to time, but have never been received as sealed bids, for the reason that they have in every case, with the exception of one, I think, been simply communications to the board.

In December, 1898, Mr. Boyles sent a communication to the board offering to clean seats for 85 cents. This proposition was accepted and the contract was let without asking for any other proposition.

In December, 1899, communications again began to come in offering to clean and varnish seats at various prices. Some of these communications were handed in without even having envelopes upon them, and others in open envelopes, and one, the bid of Andrew Kiewit, was handed to me a few minutes before board meeting with the request that I should not open it until the board met.

I showed clearly today, by my testimony and the affidavit of Mr. Kiewit, that this proposition was not opened until it was opened in the board. It happened, however, that one other proposition which had been handed to me, simply as a communication, named the same price—viz., 55 cents—as that quoted in Mr. Kiewit's bid.

It is my duty as secretary of the board to open communications addressed to the secretary and to the board, excepting in cases where the board has asked for sealed bids, and in all such cases I have never opened bids, excepting by mistake, when they were not marked on the envelope so as to indicate that they were bids.

This seat-cleaning contract for 1899 was let simply after successive propositions had been offered by different parties and the price constantly ran down. The contract awarded to Oscar Peterson at 54 cents per seat is not, in reality, worth the paper it is written on, for the reason that he could not afford to clean and varnish seats as they should be cleaned and varnished under the specifications in Mr. Bagles' contract for that price. Mr. Boyles received 85 cents, whereas Mr. Peterson offered to clean them for 54 cents.

I recommended to the board at a previous meeting that if the board intended to let a contract for seat-cleaning it should prepare specifications and invite sealed bids, but this was not done, consequently the communications which were received with regard to seat-cleaning could not be considered sealed bids, and, as I have stated above, some of them were not even enclosed in envelopes.

The fact that the last communication received by the board offering to clean and varnish seats came from a relative of a member of the board should not be used to confuse the minds of the people and cause them to believe that these were sealed bids. The entire proceeding with regard to the seat-cleaning contract let in December, 1899, was unbusinesslike, but I should not be held responsible for the actions of the board, and, while the investigating committee understands the facts, I believe, I desire that the public also should know the truth with regard to the above matters. Very respectfully yours,

J. M. GILLAN,
Secretary Board of Education.

W. S. Philpot, Albany, Ga., says: "DeWitt's Little Early Risers did me more good than any pills I ever took." The famous little pills for constipation, biliousness and liver and bowel troubles.

CASTORIA
For Infants and Children.
The Kind You Have Always Bought
Bears the Signature of Chas. H. Fletcher.

NEW BOOKS AND MAGAZINES

Something to Interest People with a Longing For the Stage.

GREAT INVENTOR WRITES A NEW BOOK

Works of All Kinds for All Classes of Readers—Another Nebraska Poet Comes to the Front—Current Publications.

In his preface to "The Stage as a Career," Philip G. Hubert says: "A few months ago the daughter of an old friend came to me with the following question: 'What shall I do to earn a living? I haven't a penny in the world. I have been fairly well educated, but I don't know enough about music to teach it; I hate the idea of going into a school, even if I could get a school position, which is doubtful. Some of my friends have suggested the stage; I used to do fairly well in private theatricals. Supposing that I can earn a living salary by acting, would you advise me to do it? What sort of a life is it? What are its advantages and disadvantages? Why do some people succeed on the stage and others fail? And how shall I go to work to get a foothold in a profession that I hear is already overcrowded?'" Mr. Hubert's answers to these questions make up a modest little volume that will be of the very greatest interest to every person with a desire for the stage. Mr. Hubert's experience as a dramatic critic has brought him into close relations with the stage, and he speaks upon the subject with personal knowledge. His volume gives a sketch of the actor's life, its requirements, hardships and rewards. He describes the qualifications and training essential to success and gives expert opinions from such famous actors as Sir Henry Irving, Lawrence Barrett, Dion Boucicault, Joseph Jefferson, Helen Modjeska, Mary Anderson and Maggie Mitchell. G. P. Putnam's Sons. Price $1.

Elisha Gray is a name to conjure with in matters scientific, and especially in those associated with electricity. His fame among scientists is secure, because based on scientific achievement. Of his many inventions probably the best known are the telephone—now a commonplace miracle of everyday life—and the telautograph, which reproduces at one end of an electric line the exact handwriting, drawing or tracing made with a pen at the other end. But in practical telegraphy and other electrical processes his ingenuities have wrought great economic changes. It is a fortunate thing that such a man should have found time and inclination to write a series of familiar talks for the unscientific on what he calls "Nature's Miracles"—wonderful things which are subservient to the rule of law. This Prof. Gray has done, and a volume has appeared with "world-building and life." It is a neat, interesting little book, written, as the author says, for those who have not, and who cannot have, the advantages of a scientific education, for young readers who will be helped by these plain, general views of topics which their textbooks will give them in detail. For popular and school libraries and for the "general reader" who is not spoiled for everything but fiction, this book must be of especial worth. Fords, Howard & Hulbert. Cloth, 60 cents.

"The Scarlet Stigma" is a drama in four acts by James Edgar Smith. It is a booklet of eighty-two pages, written by a well known lawyer of Washington, D. C. It is both a drama and a tragedy, founded upon Hawthorne's "The Scarlet Letter." In the form of a drama, the tragic story is told more impressively than even in the great classic romance. For its literary elegance the drama deserves the best words of commendation, while at the same time it is deeply searching in all the moral bearings of the questions raised. It unearths hypocrisy and the shallowness of men's applause, and reveals even the sinful and repentant as garbed in angelic attire. Hester Prynne, the woman with the scarlet letter, and Roger Prynne (called Dr. Chillingworth), the wronged husband, are wonderfully interesting characters. The drama is told so modestly and the sad truths so hedged by the spirit of right and virtue as to leave only the most healthful, strengthening lessons. James J. Chapman, publisher, Washington, D. C.

The Penn Publishing company has brought out four small volumes in uniform binding that will appeal to such as are interested in the subjects considered. "Practical Palmistry" is a reliable treatise on the art of character reading through an examination of the hand, based on actual experiences. The author of this work of 225 pages is William Frith. Marguerite Wilson is the author of "Dancing," which is described as a complete instructor and guide to all the new and standard dances, with a full list of calls for all the square dances, the necessary music for each figure, etiquette of the dances and 100 figures for the german. Still another volume is "A Dictionary of Mythology," by John H. Bechtel. It contains short and interesting sketches of characters found in Grecian and Roman mythology, with all proper names carefully pronounced. The last in this quartet of books is by Paschal H. Coggins and bears the title, "Law and How to Keep Out of It." It contains an explanation of those legal principles which concern the everyday affairs of busy people. The Penn Publishing company, Philadelphia. Paper, 30c.

Volumes of Verse.

Dr. J. A. Pollard of Nebawka, Neb., has published a booklet of verse under the title, "Miscellaneous Verses of an Egotist." The poems for the most part are short, only a few verses in each, and they are almost all of a serious or a religious character. The following, which is a fair example of the verse, may serve to give an idea of its style and character:

Flown are the friendships we cherished;
Blough is the pathway we tread;
Every fond hope is now perished;
Darkness is deep overhead.

Weary and worn with our quest,
Always our spirits are sighing;
"Rest," is our prayer, "only rest,"
"Rest, only rest, we are crying
Ever we look to "Work is best,"
No one game victory by dying."

"Sorrow endures for a night,
Happiness comes in the morning,"
Ah, then we'll wait for the light;
Then all these cares we'll be scorning.
Then all the shades that adhere us,
Ugly and huge, will be gone;
Courage, then, let us be joyous,
Keeping stout hearts till the dawn!

Typographically, it is a neat little book and speaks well for the publisher, the Nebawka Register.

"One Hundred Choice Selections" contains 100 absolutely new pieces, not a single one of what has ever appeared in any other book of recitations. When it is realized how large is the number of recitation books published, it will be understood how difficult it is to get entirely new selections. The fact of their being new does not in the least detract from their merit. While there are, of course, different degrees of merit in the pieces, there is not a poor one among the hundred. A number of them have been specially written for this issue; others are extracts from current and popular literature and are here used only by special permission of the authors and publishers. The Penn Publishing company, Philadelphia. Paper, 30c.

Educational Works.

"A History of Education," by Levi Seeley, professor of pedagogy in the State Normal school at Trenton, N. J., is a book that will interest all educators. Nearly all the active teachers in the United States, now numbering over 400,000, are required to pass an examination in the history of education. Normal schools and colleges with pedagogical departments lay particular stress upon this subject, and the superintendents of education in most states, counties and cities now require their teachers to possess a knowledge of it. This book is not based on theory, but is a practical outgrowth of Dr. Seeley's own classwork after years of trial. It is a working book, plain, comprehensive, accurate and sufficient in itself to furnish all the material on the subject that can reasonably be required by any examining board, or may be included in a normal or college course. American Book company. Price, $1.25.

One of the most important factors in the child's education is the awakening of his imagination and interest, and with this idea in mind Katharine Pyle has collected a volume of tales and verses under the title "Prose and Verse for Children." They deal with the little incidents of child life and tell of the doings and fates of animals that have come under the author's notice and from which lessons may be instilled into the child's mind. The selections are classified according to the months, beginning with September, and will not fail to hold the child's attention. The vocabulary is unusually large and the illustrations especially interesting. Price, 40 cents.

Rural Science.

"Forage Crops Other Than Grasses," how to cultivate, harvest and use them, is by Thomas Shaw, professor of animal industry at the University of Minnesota. Under the term "Forage Crops," as used by the author, are comprised all pasture plants which are sown from year to year—and which are fed off by the animals in the field. How easily and satisfactorily forage plants can be made to supplement perennial pastures, how profitably they can be raised on land which otherwise would be idle, and how important a place they are destined to occupy in the near future in systematic crop rotation in every stock and dairy farm has been the author's aim in writing this book. The work has a practical ring about it from beginning to end and begets confidence in the reader as to the value of its contents. Orange Judd company, New York. Price, $1.

Books Received.

"Historical Tales from Shakespeare," by A. T. Quiller-Couch. Charles Scribner's Sons. Price, $1.50.

"The Life and Works of Dwight L. Moody," by Rev. J. W. Hanson. W. B. Conkey company, Chicago. Price, $1.

"Healthy Exercise," by Robert H. Green. Harper & Bros.

"With Sword and Crashie," by Edward S. Van Zile. Harper & Bros. Price, $1.50.

"From Pot-Closet to Palais Royal," by Mary V. Littel. J. S. Ogilvie Publishing company. Paper, 25 cents.

"How England Saved Europe." The Story of the Great War, 1793-1815," by W. H. Fitchett. Charles Scribner's Sons. Price per volume, $2.

"Growth of Nationality of the United States," a social study, by John Bascom. G. P. Putnam's Sons. Price $1.25.

"Voices of Freedom" and Studies in the Philosophy of Individuality, by Horace W. Dresser. G. P. Putnam's Sons. Price $1.25.

"The Regeneration of the United States," a forecast of its industrial evolution, by William Morton Grinnell. G. P. Putnam's Sons. Price, $1.

"The Stage as a Career," a sketch of the actor's life, by Philip G. Hubert, Jr. G. P. Putnam's Sons. Price, $1.

"Heredity and Human Progress," by Dr. Duncan McKim. G. P. Putnam's Sons. Price, $1.

"How Women May Earn a Living," by Helen Churchill Candee. The Macmillan Co. Price, $1.

"The Story of France," from earliest times to the consulate of Napoleon Bonaparte. Macmillan Co. Price, $2.50.

"By the Marshes of Minas," by Charles G. D. Roberts. Silver, Burdett & Co. Boston.

Literary Notes.

D. Appleton & Co. will shortly publish an important work on "Trusts and the Public," by George Gunton.

"A History of the Spanish-American War," by Richard H. Titherington, will soon appear from the press of D. Appleton & Co.

Grace Marguerite Hurd is a new writer whose novel "The Bennett Twins," will be published shortly by the Macmillan company.

James Breck Perkins has just completed for G. P. Putnam's Sons "Richelieu," which will be shortly presented in their "Heroes of the Nations" series.

Stephen Bonsal, lately war correspondent to the New York Herald, has written a book which the Macmillan company will publish this month under the title of "The Golden Horseshoe".

A book which should be of use to women who intend to travel more or less alone in Europe is Mrs. Mary Cadwalader Jones' "European Travel for Women," which the Macmillan company will publish in a few weeks.

An early portrait of Swinburne, by Dante Gabriel Rossetti, forms the frontispiece to the February Book Buyer. The picture is made from the original drawing in the collection of George A. Armour.

The scene of Robert Herrick's new novel, "The Web of Life," is in Chicago at the time of the Pullman strike, the Debs riots and the following years of business depression. The Macmillan company will publish it early this spring.

Prof. George Edward Woodberry's "Makers of Literature" (the Macmillan company) will contain reprints of his "Studies in Letters and Life," together with essays on Shelley, Landor, Browning, Arnold, Byron, Coleridge, Lowell, Whittier and others which have appeared since his former little volume appeared.

The February issue of the International Monthly will contain the following articles: "Art as a Means of Expression," by W. J. Stillman; "Japan's Entry into the World's Politics," by Garrett Droppers; "The Opera in America and Europe," by H. T. Finck; "The Future of the Short Story," by E. Charlton Black; "Recent Work in the Science of Religion," by C. H. Tuttle.

In the series of "Pocket English Classics," published by the Macmillan company, the new volumes announced for the spring are "Books 1 and 2 of Paradise Lost," "Marmion" and "Julius Caesar." Each volume in this series is a handy limp, in limp covers and has introduction, critical notes and portrait for those who wish to know something of the work or author.

We believe that there has been no popular book hitherto written concerning birds' nests, notwithstanding the fact that this is a subject which particularly appeals to persons who love nature and yet have not the time or opportunity to pursue regular scientific investigation. To overcome this want A. Radcliffe Dugmore has written and illustrated for the Doubleday & McClure company a book which will bear the title "Bird Homes."

G. W. Steevens, the famous English war correspondent, who died the other day of fever at Ladysmith, South Africa, was one of the few journalists of the day who have made any really important contributions to history and literature. Mr. Steevens' last book is "The Tragedy of Dreyfus," published by the Harpers only a short time before the author's departure for the Transvaal. No more vivid piece of descriptive writing has appeared in years and the book will undoubtedly go on record as the best and clearest account of the entire affair. Mr. Steevens had engaged to write a number of articles on "The Trophies in the Transvaal" for Harper's Magazine and his death has doubtless deprived us of what would undoubtedly have been a most valuable work on the British policy and the action of the war.

A new idea has originated in Omaha and has been put to a practical test. It takes the form of a magazine with the title "The Children of the United States." The editor is Miss Grace Sorenson, a graduate of the Portland (Ore.) High school, at present a resident of Omaha. It is a monthly magazine containing exclusively of stories, poems and letters written for and by pupils under 18. Its object is to encourage bright children in literary work and to furnish a magazine of common interest to all the school children of our country. Every bright pupil is invited to contribute articles for publication. Several good magazines for children are already in existence, but the editors, managers and contributors are all adults. "The Children of the United States" is a children's magazine, the editor and manager of which is a young lady of 18, and the contributors children under 18 years.

FRANK CASE NEARS THE END

Evidence is Closed and the Attorneys Are in the Midst of Final Arguments.

MEMBER OF THE HOUSE GIVES TESTIMONY

Representative J. O. Detwiler Swears the Aye and Nay Vote Was Taken on Passage of Fee Bill—Other Witnesses Absent.

The mandamus proceedings brought by the county commissioners to compel Albyn Frank, ex-clerk of the district court, to render an account of fees in accordance with the recently enacted law governing district clerkships, is nearing the end in Judge Estelle's court.

At the forenoon session yesterday testimony was closed and in the afternoon the attorneys began their final argument. Judge Estelle will probably render his decision some time today, but it will not be final, for it is understood that appeal will be taken—especially if the decision is against Frank.

The witness of the forenoon was J. O. Detwiler, who was a member of the house during the last session of the legislature. Representative Detwiler said much to establish the legality of the fee law which Frank contends is void by reason of technical errors in the method of its enactment. He swore he was present on the day the bill was passed and that the aye and nay vote was called—this being one of the disputed points. He also testified that he began to keep a record of the ayes and nays and succeeded in doing so until toward the close of the roll call, when, by reason of confusion in the house, he lost track of the vote. He hurried to the clerks' desk, however, and supplied the missing votes from the clerk's record. In this way Mr. Detwiler was positive that the aye and nay vote was properly recorded by the clerk. He stood alongside of him and saw it done. The vote as kept by Mr. Detwiler was not any part of the official records, but simply for his own information, as members of the legislature usually do when an important bill is called for passage.

No further light has been thrown on the mystery surrounding the mutilation of the house journal, whereby the official history of the fee bill is abridged, but enough evidence has been adduced at this hearing to show that some person, unidentified thus far, must have "tampered with" the records. In view of the deputy secretary of state's testimony to the effect that numerous persons were from time to time permitted to examine the house journal after it passed into the secretary's custody, no way has yet developed by which the act can be fastened upon any individual.

Tuesday afternoon the county attorney asked for a continuance of the case until Thursday in order that two witnesses from out in the state might be brought in. He said he was not fully informed as to the importance of these witnesses, but he believed they might tell something of interest. On Thursday the county attorney announced that he had thus far been unable to secure these witnesses, but that he believed he could do so if given a little more time. There was objection to this and Judge Estelle ruled that the testimony be closed and that final argument proceed.

During a discussion of the mutilated record in the morning, and when Frank's attorneys were making one objection after another so rapidly that the shorthand reporter could hardly have recorded them had he not been expert, Judge Estelle said:

"When a record is lost it may be established by competent testimony."

County Attorney's Affidavit.

The argument was not finished when court adjourned at 5 o'clock and it will be resumed this morning. In support of his motion for a continuance of the case, in order that additional witnesses may be secured, the county attorney filed in the office of the district clerk a lengthy typewritten affidavit in which he sets forth in detail his reasons for believing that additional witnesses may be secured. In substance the affidavit states that Edward Rosewater, editor of The Omaha Bee, communicated to the county attorney the belief that he could supply the names of witnesses who could give positive testimony to the effect that the yea and nay vote was taken on the fee bill at the time of its passage; that the house concurred in the senate amendments, and that a proper record was made of the proceeding. The affidavit further sets forth that these witnesses are Messrs. Harrison and McCarthy, the former a Bee correspondent and the latter a member of the house. It also says that Mr. Rosewater made a trip to Lincoln, from which place he wired the county attorney that he had been successful in locating witnesses, but that it would require a few days in which to get their testimony.

The original of this telegram is appended to the affidavit as an exhibit. In conclusion the affidavit states that through the efforts of Edward Rosewater, still further evidence has been found as to the legality of the bill and that the additional witnesses are Messrs. Wall and Gilmore, respectively clerk and assistant clerk of the house. It is also recited that Mr. McCarthy was in Omaha at the time the county attorney made the motion for continuance. The county attorney asked that the case be laid over until February 19, but Judge Estelle ordered the final argument to proceed.

Claims Damages.

August Stolenski in his petition filed in the United States circuit court on Thursday asks $15,000 damages from the Cudahy Packing company for injuries received while in the employ of the company in December, 1896. The plaintiff alleges that by reason of the negligence of one of the employes of the company a glue vat was left in such a condition that while he was engaged in the performance of his duties he fell into the vat and was so severely scalded that he is permanently disabled.

Hardings Are Not Guilty.

The case of the state against Louis K. and Lettie Harding, charged with receiving stolen property, which was begun in Judge Baker's court Wednesday, was not prosecuted to the end. After the trial had fairly started, Judge Baker took the case from the jury, there being no evidence upon which to base a conviction. The Hardings stood accused of being in league with C. E. Holmes, who was tried and acquitted of stealing brass fixtures from the B. & M. Railroad company.

Notes of the Courts.

William Taylor and Charles Wood, colored, are on trial before Judge Baker, charged with stealing $8 worth of brass valves from the Pacific school building.

Arthur C. Bunce has been awarded decree of divorce from Adeaide C. Bunce. Judge Keysor granted separation on a showing of extreme cruelty. Among other allegations it was set forth that when the plaintiff was ill for six weeks in a hospital, the defendant did not call to see him.

The Strahorn-Hutton-Evans Cattle company filed reply in the United States circuit court yesterday to the answer of Abe Moore to its cross-bill in the case of Moore against the cattle company. In its reply the company denies every allegation made by the complainant, who alleged that they were seeking his financial and personal ruin.

Building Permits.

The following permits have been issued from the office of the building inspector: Deere & Co., South Tenth, brick warehouse, $6,000; A. Buchanan, Twenty-ninth and Dodge, frame double dwelling, $1,800; Mrs. Dugan, 1324 South Thirteenth, repairs, $100; Mrs. Kate Rich, Twenty-ninth and Pratt, frame dwelling, $700.

THE TRICK.

A TRICK may involve deceit or it may be a display of peculiar skill. There is deceit in some soaps, but there is none in Ivory Soap; it is a display of peculiar skill. It will stand any test and can be relied upon to do all that is claimed for it.

IVORY SOAP IS 99 44/100 PER CENT. PURE.

COPYRIGHT 1891 BY THE PROCTER & GAMBLE CO. CINCINNATI

REMODELING OLD POSTOFFICE

Work is Progressing Rapidly and Must, Under Contract, Be Completed by July 1.

The work of remodeling the old postoffice building, which is to be used for the headquarters of the Department of the Missouri, is progressing rapidly. The structural work has been completed on all floors above the ground floor and these rooms will be turned over to the plasterers in a few days.

The first floor when completed will contain thirteen offices, which, it is said, will be used by the chief commissary and paymaster's departments. The north and south entrances on the east side of the building will be closed and the doors will be replaced by windows. The steps in front of the central entrance on the east side have been removed and masons are at work bringing the wall of the basement up to the level of the sidewalk. The entrance at this door will be on the level of the walk into a vestibule, whence steps will lead to the main corridor, which extends through the building from east to west, crossing a corridor which runs south from the north door, which will remain in its present condition. The two corridors on this floor will be of mosaic tiling, and all of the walls will be fireproof.

The second floor, containing the offices of the adjutant general, judge advocate and medical department, will consist of twelve rooms. The corridor, which runs south from the stairway, will be floored with mosaic tiles. The third floor, with eight rooms, will contain the offices of the chief quartermaster, the old court room being set apart for the clerical force. The fourth floor will be used for storage purposes. An elevator is being placed in the northwest corner of the building, and the sewage and plumbing system has been entirely rearranged.

The contract for the reconstruction of the building calls for its completion in time for the department to take possession at the beginning of the next fiscal year, July 1.

CHARLESTON WINS THE PRIZE

Committeeman Pearse Explains Reasons for Locating Teachers' Convention in Southern City.

The executive committee of the National Educational association, of which Superintendent Pearse of the Omaha schools is treasurer, has announced that the next convention will be held at Charleston, S. C., from July 7 to 13. In speaking of the choice Superintendent Pearse says:

"The controversy regarding railroad rates which has made it necessary to defer the decision has been finally settled, the roads having granted all the demands made by the committee. Notwithstanding the fact that the Board of Directors at the Los Angeles meeting indicated their preference for Charleston by a more decisive vote than has been cast within ten years the executive committee, to which the choice was referred, visited three other cities inviting the association to determine beyond question which location would best serve the largest number of educational interests.

"The committee was impressed by the earnest appeal of the citizens of Charleston, endorsed by the educators and press of the south, that the present is a most opportune time for the association to lend its aid in support of the revival of educational interests in that region. The recently completed auditorium, with a seating capacity of 8,000, appeared to be better adapted for the sessions than any audience room in which the assembly has ever met. Commodious halls and churches were found in sufficient number for departmental meetings. A complete local organization has been perfected and written reports were submitted to the committee at the time of its visit, showing the most careful arrangements for entertaining the convention."

IRON FIRE ESCAPE AFIRE

Wind and Live Wires Combine to Produce a Startling Spectacle During the Blizzard.

Persons in the vicinity of Sixteenth and Farnam streets at an early hour yesterday morning saw a column of green and blue flames in the rear of the Paxton block for which they were unable to account. The brilliant flashes chased each other up and down a vertical space of about fifty feet, appearing and disappearing at intervals of a few seconds. Finally one of the spectators came to the conclusion a telegraph pole was burning, and so notified the fire department.

Upon investigation it was found that a live electric wire, swayed by the wind, had whipped against the iron fire escape in the rear of the Paxton block until the insulation had worn away, leaving the metal exposed. The stairway soon became charged with electricity, and every time the swinging wire touched the iron railing there was a blinding flash of light, followed by darkness as the contact was broken.

There was no damage. At daylight the electric light company repaired the wire.

Collections During January.

The following statement issued by the city treasurer shows the receipts and disbursements for January, the notable item being the personal tax collections, which apparently justify the employment of two collectors, recently added to the pay roll:

Balance December 31		$346,759 40
Tax collections, realty		15,075 58
Tax collections, personal		6,367 55
Tax collections, special		20,429 47
Other collections		215,846 35
Disbursements	$282,120 49	
Balance January 31	425,357 86	
Totals	$707,477 35	$707,477 35

CRUTCHES

The best quality of maple crutch, per pair, $1.50.

CRUTCH TIPS 25c
A Pair. Postage, 5c.

The Aloe & Penfold Company,
Deformity Brace Manufacturers.
1408 Farnam Street, Omaha.

Drex. L. Shooman's Snow Shoes—

Are built of the kind of leather that keeps the snow out—particularly is this true of our woman's $2.50 calfskin shoes—made of genuine calf, with oak sole leather bottoms that have the extension edges—made on the new masculine toe last—in all sizes and all widths, from A to EE—the very ideal snow and winter shoe—no rubbers required with these up-to-date women's shoes at $2.50—we guarantee the fit and wearing quality of these sensible shoes.

Drexel Shoe Co.,
Omaha's Up-to-date Shoe House.
1419 FARNAM STREET.

Our Four Winners—

The incomparable Knabe—the sweet-toned Kranich & Bach—the brilliant Hallett & Davis—the reliable Kimball—are the four leading makes of high grade pianos—pianos that we have been selling for 25 years to everybody's satisfaction—they are made up in the most beautiful of woods—in the latest styles and sizes—and at the prices and terms we are making at the present time you will find it to your interest to investigate—remember we have been easy on you for a quarter of a century.

A. HOSPE.
Music and Art. 1513 Douglas.