REJECTS COUNTY FRANCHISE

maha Suburban Railway and Traction Company Doesn't Like Contract.

FAILS TO SECURE RIGHTS OF GRANTEE

Company's Attorney Says the Time for Construction and the Term of Contract Are Too Short and He Also Finds Many Other Faults.

"Our company will not and no other company can afford to accept the suburban railway franchise as drawn by the special counsel for the county commissioners," said the attorney for the Omaha Suburban Railway and Traction company yesterday.

"As a matter of fact," he continued, "it is no franchise at all; it is merely permission to make plats and surveys. It provides that plats and surveys of the proposed railway lines must be filed with the county board within six months and that if these plats and surveys are not satisfactory to the board then the franchise is forfeited. The proposed contract does not allow the company a second chance to file acceptable plats and surveys.

"The county board's franchise prohibits the company from building on any highway where the tracks or appliances of any other street railway exist. Now, what is to prevent the Omaha Street Railway company from placing its appliances on every roadway we may want to use for an entrance to the city?

"Another serious objection to the proposed franchise is the requirement to build ten miles of each line of the new system within a year. There are many things which might happen to make such work impossible in so short a period of time. The two years granted for the completion of the entire system is also too short a period.

"Then, the proposed franchise is only for twenty-five years and it is extremely doubtful that the property could be put on a paying basis in that time. Fifty years is a short enough term for the contract to run.

"It would be recklessness to invest money in a street railway under such terms as are offered by the county board and it is entirely safe to say that no company will accept the franchise in anything like its present form."

FALLING HAIR STOPPED.

Baldness Cured by Destroying the Parasite Germ that Causes It.

Baldness follows falling hair, falling hair follows dandruff and dandruff is the result of a germ digging its way into the scalp to the root of the hair, where it saps the vitality of the hair. To destroy that germ is to prevent as well as to cure dandruff, falling hair and, lastly, baldness. There is only one preparation known to do that, Newbro's Herpicide, an entirely new, scientific discovery. Wherever it has been tried it has proven wonderfully successful. It can't be otherwise, because it utterly destroys the dandruff germ. "You destroy the cause, you remove the effect."

DR. MILLER DISCUSSES CANAL

Declares He is Not Originator of Project and Wants Credit Given to Proper Source.

OMAHA, Aug. 2.—To the Editor of The Bee: The Bee says I claim to be the father of the Platte canal project. This is a mistake. I wish I could justly claim to be the father of a discovery which some day is sure to make Omaha a great manufacturing city. That honor belongs to S. L. Wiley. It was Mr. Wiley's head and money which demonstrated, through the skill and surveys of Mr. R. B. Howell, Andrew Rosewater and other competent engineers, the entire practicability of the enterprise.

The Bee also says that "as a matter of fact" the project was defeated because a great majority of the "taxpaying citizens" were disinclined to incur additional burdens of taxation. I beg The Bee's pardon, but the facts do not bear out this statement. A majority of the people voted for the bonds. The scheme failed only because they did not receive a two-thirds vote. That two-thirds vote was not secured because of the falsehoods that were circulated about the project. And, by the way, does The Bee remember the name of the gifted poet and "engineer" who was sent out to measure the water of the Platte and forgot to find the south channel? Mr. Andrew Rosewater can furnish it if The Bee has any further interest in the matter.

What Omaha lost in the dangerous days when it rejected its great opportunity to become a second Minneapolis no man can estimate. A few flouring mills of the sort and size that our city boasts, located on the Papillion as a nucelus, would fix the character of Omaha, and its certain greatness as a manufacturing city, and in population and wealth, beyond all earthly doubt or question. If the men who defeated this project by foul means had used their acknowledged power in giving it success hundreds of homes, thousands of wrecked hopes and wounded hearts, and more than we can ever know of premature graves, would have been saved and prevented in Omaha. With that great work in progress and its certain promise, Omaha would never have known any serious injury from the panic of '92 or from the ruinous drouths which succeeded it.

When individual greed for money, haste to be rich and the personal jealousies which have been the chief curse of Omaha from the days of its foundation, shall give place to a new, proud and generous public spirit, Omaha will see that it cannot live without cheap power, and plenty of it, from the Platte river. It is my well instructed opinion that it cannot get it by transmittal over electric wires twenty-five miles long.

GEORGE L. MILLER.

JUSTICE

Is portrayed as a woman, yet her sex might complain that they get scant benefit of her powers. There is little justice, it would seem, in the suffering that many women undergo month after month.

Justice acts upon the legal maxim that ignorance of the law cannot be pleaded in mitigation of punishment. It is ignorance which causes so much womanly suffering. Ignorance of the requirements of womanly health; ignorance on the part of those who attempt to cure and fail, and ignorance of the fact that Dr. Pierce's Favorite Prescription cures womanly diseases. It establishes regularity, dries weakening drains, heals inflammation and ulceration and cures female weakness.

"When I first wrote to Doctor Pierce concerning my health," says Mrs. Mollie R. Carpenter, of Linaria, Cumberland Co., Tenn., "I was so weak I could only write a few words until I would have to rest; was so weak I could hardly walk. Words cannot express my sufferings; dimness of sight, palpitation, shortness of breath, black spots or else shining lights before my eyes, terrible headache, numbness in my arms and hands and tongue, also my jaws would get numb; constipation, falling of the uterus, disagreeable drains, soreness through my bowels; in fact I was diseased from head to foot. Now I can do my own washing and cooking. I can take a ten quart pail in one hand and a six quart pail in the other (full of water), and carry both one-fourth of a mile and never stop to rest. I am as heavy as I was at 19 years (125 pounds). I used thirty bottles of 'Favorite Prescription' and 'Golden Medical Discovery' and twenty-five vials of 'Pleasant Pellets.'"

Dr. Pierce's Common Sense Medical Adviser, paper covers, is sent *free* on receipt of 21 one-cent stamps to pay expense of mailing *only*. Address Dr. R. V. Pierce, Buffalo, N. Y.

LINEMAN RECEIVES A SHOCK

Fred Robinson, Employe of Council Bluffs Light Company, Killed While at Work.

Fred Robinson, lineman in the employ of the Citizens' Gas and Electric Light company of Council Bluffs, was accidentally killed yesterday morning at Sixth street and Tenth avenue in that city.

Robinson was engaged in running a wire into the McCormick building and was at the top of a pole thirty feet from the ground. He was engaged in fastening his safety belt to the pole when his hand struck a live wire. The shock rendered him insensible and he fell to the ground, where his head struck against the iron top to a sewer flush basin, and his skull was fractured. He was taken to the Woman's Christian association hospital, where he died fifteen minutes later, never having regained consciousness. Robinson came from Crete, Neb., where his family resides. He was 26 years old and has been employed by the company as a lineman for about five months.

Seasonable Fashions

3890 Three Piece Skirt
22 to 30 Waist.

Woman's Three Piece Skirt with Tucked Flounce. No. 3890. To Be Made with Slight Train or in Round Lenth—Tucks and flounces continue to make the accepted finish for all soft and pliable materials and are eminently graceful and charming. The smart skirt given includes the latest features and is admirably well adapted to soft finished silks, lightweight wools and all the many transparent and diaphanous materials; but in the original is of cream canvas veiling hung over white.

The skirt is cut with front gore and wide side portions that are tucked at the upper edge to give a hip yoke effect, extra fullness at the upper edge, but sloped at the lower to produce a train, and is laid in fine tucks that are stitched approximately, to one-third of its depth.

To cut this skirt for a woman of medium size, 10¼ yards of material 21 inches wide, 8 yards 27 inches wide, 6½ yards 32 inches wide or 5¼ yards 44 inches wide will be required.

The pattern 3890 is cut in sizes for a 22, 24, 26, 28 and 30-inch waist measure.

For the accommodation of The Bee's readers these patterns, which usually retail at from 25 to 50 cents, will be furnished at a nominal price, 10 cents, which covers all expense. In order to get any pattern enclose 10 cents, give number and name of pattern wanted and bust measure. Allow about ten days from date of your letter before beginning to look for the pattern. Address, Pattern Department, Omaha Bee.

ASPEN TUNNEL PROGRESSES

Ten Weeks May Bring the Finish of This Engineering Feat.

CHIEF ENGINEER BERRY IS CONSERVATIVE

Official Doesn't Care to Go on Record as Predicting Exact Date Upon Which the Tunnel May Be Opened to Traffic.

If nature and good fortune combine to speed the work the great Aspen tunnel which the Union Pacific is building in Wyoming may be completed, opened, tracked and ready for traffic in ten weeks. Chief Engineer Berry is very cautious in prognosticating anything concerning the future of Aspen tunnel. He said:

"We intend to open the tunnel this year, but how long it will be before that is accomplished, whether two months or four, depends upon a myriad of things. If we should strike soft, easily-worked rock the remainder of the way that would facilitate things greatly. If it is tough and of great resistance the work will be retarded. There are many other conditions which enter into the chances for an early completion, such as difficulties with the inner arching, accidents to machinery, etc., and in fact you cannot tell how long it will take to finish a tunnel by calculating on the time it has taken to get a certain distance."

It was further learned from Mr. Berry that all but 600 feet of the 5,900 feet of the tunnel's projected length is now completed, so that 200 yards of rock is all that stands between the workmen and the other side of the mountain. When that is finally blasted and bored and hewn away it will remain but to run the track through, which will amount to nothing at all compared with the previous work.

Everything is now in readiness outside the tunnel at either end. The track is now almost up to the entrance both places and will be there by tomorrow. So only a mile and a quarter more of trackage will be necessary to complete the line of railway.

Stories of vast finds of oil during the journey through the mountain have been circulated, but Mr. Berry's statement concerning that feature puts a quietus to the rumors of rich finds. He said that the oil in Aspen tunnel amounted to nothing at all so far as any wealth or value was concerned. There is no fortune to be made from the oil in that tunnel, he says.

MAYOR AT PRAYER MEETING

Chief Executive and Councilmen Represent City at Rev. Smith's Thanksgiving Service.

Five hundred additional seats had been secured by the managers of the tent meetings under the direction of Rev. Merton Smith at Twenty-second and Paul streets, but with all of this there was not room for more than half the people who gathered at the tent last night.

Prominent among those seated on the platform were Mayor Moores and Councilman Lobeck, representing the municipal organization. In the audience I. S. Hascall and other councilmen were present.

The meeting was called to order by Mr. Smith and the opening invocation was made by Rev. R. M. Stevenson of the Second Presbyterian church. The Knox Presbyterian quartet joined the regular choir in supplying music.

Mr. Smith then made a short statement in which he said that the meeting was not called to discuss questions of faith or prayer, but was for the purpose of thanking God for the rain which fell Saturday.

Selections from the Psalms were read by Rev. Frank Foster, Rev. C. N. Dawson, Rev. Thomas Anderson and Rev. W. T. Hilton. Rev. E. H. Jenks offered prayer of thanksgiving.

After a song by the girls' choir and a song by Rev. D. K. Tyndall and Miss Tyndall, Rev. Merton Smith delivered a brief sermon in which he paid little attention to the subject of the evening, but preached one of his usual discourses.

It was announced that no meetings will be held at the tent today and but one service Sunday, which will be in the evening. One service only will be held Monday, but after that three services will be held each day until Friday.

SALT LAKE TO SAN PEDRO LINE

Vice President Kerens Talks of the Clark Company's Present Plans.

Mr. R. C. Kerens has returned home after six weeks' absence in California and the intermountain states, where he had gone to attend various meetings of the San Pedro, Los Angeles & Salt Lake railroad, better known as the Clark line, of which Mr. Kerens is first vice president, says the St. Louis Globe-Democrat. Meetings were held in Salt Lake and California. Mr. Kerens says that the United States court decision at Carson City was favorable to Senator Clark, because the judge refused to grant the injunction prayed for by the Oregon Short Line, or Harriman interest, down through Box canyon, or better known in Utah and Nevada as Meadow valley wash, a difficult stretch of country of sixty miles' distance, in which there is ten or more miles of gorge and only room for one railroad. The forty miles of old grade constructed by the Union Pacific ten years ago, which was abandoned at the time of the Baring failure, part of which was laid with rails, had been taken up and the taxes levied by Lincoln county, Nevada, through which this grade passes, were delinquent for the whole of the time, payment being refused. On this old grade the court granted the Harriman interest a preliminary injunction pending a trial on the merits in September next. Judge Hawley held that affirmative action on the part of the state of Nevada, declaring forfeiture, was necessary, but this would come up at the trial in which Lincoln county would be a party. The Clark interest holds the tax titles.

Senator Clark is the leading spirit, the very embodiment, in this Salt Lake-San Pedro enterprise, and declares it to be his purpose to build a first-class railroad, a low-grade line, as straight as the topography of the country will admit, without any stint or limit upon the cost of construction, using the heaviest steel rails and the best equipment that can be procured. It will be in every sense a competitive line. The Montana senator stated publicly in San Francisco last week that he had a pride in creating a transportation line. He had no ambition to acquire a railroad by purchase. The distance from Salt Lake to San Pedro will be about 800 miles, partly through a mineral country. It is not improbable, Mr. Kerens says, that the line may be extended to the Northern Pacific, the Hill interest, near the Canadian line, making a north and south railroad through the intermountain states.

The fifty miles of the old Los Angeles Terminal railroad, which Senator Clark acquired from the St. Louis people, has been reconstructed with seventy-five-pound steel rails and new equipment provided. One thousand feet of wharf at San Pedro has been added to accommodate the Hawaiian trade that has recently sprung up from that port. This is a growing trade, and is the nucleus that stimulates the proposed steamship line to ply from that port to Honolulu and the Orient and the Philippines. This ocean transportation company will be made up of a consolidation of steamship companies and individual ocean-going transports which will be grouped for Pacific business.

Senator Clark is at present looking after his mining properties, but he expects to meet Mr. Kerens in New York in about two weeks on matters connected with the Salt Lake-San Pedro enterprise.

HE CHOPS UP LIVE KITTENS

Clarence McIntyne's Mother Declares He is the Victim of a Prenatal Influence for Cruelty.

Clarence McIntyne, 16 years old, who lives with his widowed mother at 3820 North Thirty-sixth street, is a victim of pre-natal influences. At least this is the mother's explanation of it, given when she visited him in jail yesterday, where he is held awaiting trial on a charge of practicing vivisection upon a kitten, working without anaesthetics and with no instruments other than a dull butcher knife.

Two Are Hanged.

ST. AUGUSTINE, Fla., Aug. 2.—A large crowd witnessed the execution in the jail yard here today of James Kirby and Robert Lee, who were condemned to die for the murder of Julius Eskew last May. Lee was found guilty of being an accessory in the crime. On the gallows today he protested he was innocent. Kirby's neck was broken by the fall, while Lee struggled for life for about fifteen minutes and died from strangulation.

NON-RESIDENTS MUST PAY

City Treasurer Hennings with His Van Scores Another Tax Victory.

FORCES A WHOLESALE FIRM TO SETTLE

No "Ifs" and "Ands" About It When Hennings is on Deck and Back Taxes Are Paid Under Protest to Extent of $113.49.

City Treasurer Hennings' van made a call yesterday afternoon at the sample rooms of the Tootle, Wheeler & Motter Mercantile company, 310 South Tenth street.

Taxes amounting to $113.49 have been assessed to the company during the last five years. The company refused to pay the taxes on the ground that they were excessive. It was also maintained that the goods kept in the sample rooms were not taxable in Omaha, but in St. Joseph, the headquarters of the firm.

When the city treasurer's van backed up to the sample room and Mr. Hennings announced to C. M. Schneider, manager for Tootle, Wheeler & Motter, that he would take the stock unless the taxes were paid at once, Mr. Schneider protested against the assessment and began to argue the question. The driver of the van and the treasurer's helpers were ordered to seize all the movable articles in the room, but Mr. Schneider asked for a few minutes' time and consulted an attorney. His legal adviser recommended that the taxes be paid under protest and Mr. Hennings left the sample room with a check in his pocket for $113.49.

Many of the firms maintaining sample rooms in Omaha have contended that they should not be taxed for goods kept in Omaha for inspection. Since Mr. Hennings entered the office he has disregarded all these objections and collected the taxes. Manufacturers of agricultural implements, carriage manufacturers, non-resident wholesalers who maintained sample rooms in the city formerly tried to avoid taxes.

GRIEVANCES ARE DISCUSSED

Machinists' Union Takes Up the Difference Existing Between it and Industrial Iron Works.

The trouble between the Machinists' union and the Industrial Iron works occupied considerable time at the Central Labor union last night. According to the statements made the trouble originated over the action of the managers of the company in taking work from a South Omaha packing house while a strike was in progress. The members of the Machinists' union stated that the action of the company caused the union to lose the strike at the packing house after the expenditure of over $3,000.

After much acrimonious discussion President Kleffner said that the only way to adjust such trouble was for the metal trades—the molders, the machinists, the plumbers and steam fitters and other unions of like nature—to form a metal trades' council and act as a body when trouble arose.

The president announced members of standing committees as follows:

Home Industry and Union Label—E. F. Kennedy, Otto Niederweiser, J. Harte.

Organization—E. A. Willis, A. H. Schroeder, C. Lycks.

Press—C. C. Vaughan, Harry Sage, H. A. Nichols.

Education—Fred Bauman, W. G. Wales, E. E. Philbrick, John P. Evans, Gus Holo.

A resolution from the Structural Iron Workers' union was received, asking that all members of building trades refrain from doing work belonging to members of the Iron Workers' union. It was referred back to the Building Trades' council for consideration.

Delegates were obligated as follows:

Theatrical Workers—W. L. Landon, E. S. Tucker, C. Oleson.

Cigarmakers—Joseph Flury.

Waiters' Union—Fred Baumann, Ted Nelson.

Fraternal Delegate from South Omaha—A. W. Davis.

The chairman of the Labor day committee made a brief report and then went into session with the committee from South Omaha.

While the Labor day committees were in conference the question of settling the trouble between the Coopers' union and Haarmann Bros. was discussed, it being said that the prospect for an amicable settlement is bright.

Preparing for Labor Day.

There was a joint meeting of the Labor day committees of Omaha, South Omaha and Council Bluffs at Labor temple last night, which was continued until after midnight. Early in the session it was decided that the labor unions of the three towns would unite in the celebration of Labor day, Monday, September 2; that the parade should be held in Omaha and the other ceremonies at Syndicate park in South Omaha.

Then the question of the appointment of committees was taken up. There is a joint committee of thirty, consisting of ten men from each of the three central bodies, and the work was distributed among them, each city being represented on every committee. This arrangement required considerable time and at the close of the meeting the secretary announced that the makeup of the various committees would be announced later, as he was unable to compile them from the minutes last night.

Austrian Professor in Wyoming.

CHEYENNE, Wyo., Aug. 2.—(Special.)—Prof. Fischer of the Hochchule, Vienna, Austria, will arrive in Cheyenne next week and will outfit here for an extended trip through Colorado and Utah for the purpose of studying irrigation. Prof. Fischer is one of the leading authorities in Europe on matters pertaining to irrigation and has been in the United States several weeks. Recently he conferred with Prof. Elwood Mead, the irrigation expert, who is now at Atlantic City. From that place Prof. Fischer went to Washington and looked up data pertaining to irrigation. He is now at the Buffalo exposition studying the irrigation exhibit there. Prof. C. T. Johnston, assistant in charge of the office of irrigation investigations here, will accompany him on his western trip.

Wreck on the Alton.

ODESSA, Mo., Aug. 2.—Two Chicago & Alton freight trains collided head-on at Grain Valley today. Engineer Jacques was killed and Engineer Walsh and Fireman Pulliam, all of Slater, Mo., were injured badly. Both engines were wrecked.

LIEBIG

COMPANY'S EXTRACT of Beef stands for health in the home and economy in the kitchen.

Get the genuine Liebig Company's Extract with blue signature: J. v. Liebig

GRAND JURY IS REQUESTED

Board of Education Sends Communication to District Court Judges.

WANTS MUNICIPAL FINES INVESTIGATED

In the Absence of Several Members of the Local Judiciary it is Not Likely that Immediate Action Will Be Taken.

The Board of Education has called for a grand jury to investigate the municipal fine system, about which there has been more or less talk for several months.

Secretary Burgess of the board has mailed to each of the judges of the district court a copy of the following letter:

Dear Sir: We, the undersigned, a committee appointed under the authority of the following committee report, unanimously adopted by the Board of Education, towit:

"Whereas, Certain well defined rumors exist and a committee of the Commercial club has charged a failure on the part of the Board of Education to enforce a collection of fines and charges properly due the school fund of this district, and,

"Whereas, The resolution formerly adopted by this board, requesting the co-operation of the mayor and city council in this matter, has been unproductive of results, and,

"Whereas, A rigid examination of the facts and charges herein specified and definite results can only be obtained by a grand jury; therefore, be it

"Resolved, That a committee of three be appointed by the president of this board to urge upon the authority having the power to call such a grand jury the necessity of the same and such committee is authorized to use the name of the Board of Education of the city of Omaha as requesting the calling of such grand jury," beg leave to request that a grand jury be called in accordance with such committee report.

H. M. WOOD,
M. F. FUNKHOUSER,
ROBERT SMITH,
Committee.

No action has yet been taken by the judges with reference to calling a grand jury and it is improbable that they will act until the several members of the judiciary who are out of the city return. Judges Estelle, Keysor and Dickinson are in the city, Judge Baker and Judge Baxter are in the east, Judge Fawcett is on the Pacific coast and Judge Slabaugh is at Tekamah.

FUNERAL OF E. R. OVERALL

Impressive Services at Church of St. Philip the Deacon and Interment at Prospect Hill.

The funeral of E. R. Overall was held at 9 yesterday morning from the Church of St. Philip the Deacon. The service was conducted by Bishop A. L. Williams, assisted by the rector, Rev. John Albert Williams, and the church was filled with friends and members of the Masonic lodge, of which the deceased was a member. The floral offerings were numerous and beautiful. The interment was at Prospect Hill and the services there were in charge of the Masons.

The Sixth Ward Republican club will meet in Idlewild hall, Twenty-fourth and Grant streets, Saturday night at 8 o'clock. Officers will be elected for the coming year.

IRVING G. BARIGHT, President.
F. C. CRAIG, Secretary.

Rubber Gloves

Just the thing for protecting the hands while doing housework.

Price Per Pair $1.25; by mail 10c extra.

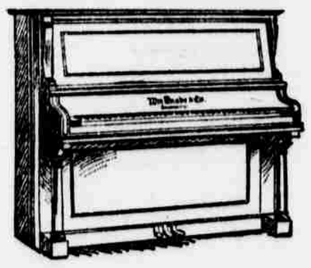
THE H. J. PENFOLD CO.

Medical and Surgical Supplies
1408 Farnam Street, Omaha.

Knabe Pianos Our Leader—

They stand today without a successful competitor to the title of the foremost piano of the land.

They are constantly imitated, but never equaled. Their premier position is unassailable. The Knabe piano of today stands for all there is in artistic pianodom. They are the pattern after which are made the pianos that aspire to be somewhere in the Knabe class. To own a "Knabe" is to have the best. Sold only at



A. HOSPE,

Music and Art. 1513-1515 Douglas.

Boys' Shoes—

Drex L. Shooman sells for one fifty. We don't believe you can go anywhere and find a shoe that equals it for the same money. We've these $1.50 shoes in all sizes for boys, just so they are boys, and we put our reputation back of every pair.

Saturday will be the last day for buying women's $3.00, $3.50 and $4.00 tan Oxfords in vici kid or Russia calf at $2.00. Remember, any women's tan Oxford in the store at this price.

Drexel Shoe Co.,

Catalogue Sent Free for the Asking.
Omaha's Up-to-date Shoe House.
1416 FARNAM STREET.

Don't Take a Lunch—

It's not necessary for you to take a lunch with you now when you go to Manhattan Beach (Lake Manawa) bathing—as Caterer Balduff is serving every evening from 6 to 8 o'clock a table d'hote dinner for 75c. The following is a sample for one day, as the menu is changed daily: Soup, cream of new corn; radishes, young onions; fish, whitefish au gratin, cucumber salad; entree baked spaghetti a l' Italienne; roast spring chicken with dressing, giblet sauce; new potatoes in cream, green peas; salad, asparagus vinaigrette; dessert, iced watermelon, ice cream, assorted cake, coffee.

W. S. Balduff,

1520 Farnam St.

Where Waves Beat High

Famous Lighthouses on the Coast.

Among other government enterprises Uncle Sam is in the lighthouse business, and, like everything else that he touches, he has developed it to a remarkable extent, for when he took over the lighthouses from the different states in 1789 their number was only eight. Now he has about the biggest stock in trade of any government in the business, writes Gustave Kobbe in the New York Herald. He has a tremendous coast line to light. It figures up 9,959 miles, including the great lakes, exclusive of the Ohio, Missouri and Mississippi rivers, and he maintains more than 2,000 lights and about 4,500 fog signals, buoys, monuments and beacons, which are summed up under the general term of unlighted aids to navigation.

The lighthouse board of the United States, which is charged with the supervision and care of all these, ranks high among the lighthouse establishments of the world. Probably, in point of practicability, smoothness of administration and readiness to adapt itself to any emergency which may be presented, it is first among all lighthouse establishments. Certainly none other has had so many varying problems to meet, for in the planning and erection of lighthouses our enormous coast line has presented many different conditions of locality. There are lighthouses and lighthouses, and the lighthouse board has had to determine just what kind of lighthouse would do for each particular point, and in perfectly adapting each structure to its site the lighthouse board of the United States probably has been obliged to erect more different kinds of lighthouses than the establishment of any foreign government.

The solid granite structures of the New England coast would never do for the submerged coral reefs of Florida or for the jetties of the Mississippi; nor, on the other hand, would a lantern hung by a nail from a tree, which actually constituted for many years one of the lights of the Mississippi river, suffice for the precipitous cliffs of the Pacific. In fact, in order to thoroughly and systematically light the coast of ocean, gulf, lake and river, our lighthouse board had to apply an enormous amount of scientific thought in solving many difficult problems.

On the coast of Maine is a series of lights built on rock and of native granite. The sites and the material were on hand, like coal and iron in Pennsylvania. These lighthouses are extremely beautiful features of the coast. With their gracefully sweeping lines, which, however, do not interfere with the impression of solidity; with the original gray deepened by the stain of numerous storms, the brunt of which they have gallantly sustained, they seem to have grown out of the very rocks on which they rest.

Among the most typical of these Maine light stations are the twin towers on Matinicus rock, far out in the entrance of Penobscot bay. Rugged though their aspect is, they have been the scene of one of the prettiest love romances in the annals of the service. In 1861 the then keeper, Captain Burgess, was relieved by Captain Grant, who brought a son with him as an assistant. Captain Burgess had a daughter named Abby, who for many years had helped him in the care of the lights and was perfectly versed in everything pertaining to them. During one winter, when Captain Burgess had gone over to Matinicus island for supplies, a severe storm sprang up, and lasted so long that for several weeks he was unable to get back. His wife was an invalid, and during this trying period Abby, then a mere slip of a girl, not only tended the lights but looked after the comfort of her invalid mother and several younger brothers and sisters, cheering them up during the stormy days and nights.

When Captain Grant and his son came to the rock Captain Burgess left his daughter there to assist the newcomers awhile and instruct them regarding certain peculiarities of the lights. Perhaps it is not at all strange that the younger Grant proved a very apt pupil, for Miss Abby was a very attractive teacher—so attractive, in fact, that when her pupil had learned to take care of the lights he persuaded her to allow him to take care of her for the rest of her life, a proposition to which she assented. Including the eight years she already had been on the rock and the subsequent period she remained there with her husband, it was her home altogether for twenty-two years.

The most famous lighthouse on the American coast is that on Minot's Ledge, off Cohasset, on the coast of Massachusetts. It is the American Eddystone, for Minot's Ledge lighthouse rises right out of the sea. The rock which forms its foundation is entirely submerged, and in a northeasterly storm the lighthouse is absolutely exposed to the full force of the Atlantic ocean. The first lighthouse which was erected on the site, in 1848, was built on iron screw piles, and in a furious storm which burst over the coast in 1851 it was overthrown and the two keepers on it perished. This was the greatest tragedy in the history of the American lighthouse administration. The present granite structure was begun in 1855 and finished in 1860. Owing to the exposure of the site work could be carried on there only during the summer, and even then there were two summers when only 130 working hours could be had. I spent a week one winter on Minot's Ledge, and the reverberations of the waves against the lighthouse during a storm were terrific.

However, life on Minot's Ledge is agreeable compared with existence on the Nantucket Shoals lightship, which is forty-three miles out at sea from Sankaty Head, Nantucket, on which and on the vessel will be installed the Marconi system. This lightship is a tossing, rolling island, entirely out of sight of land, and the crew is cut off from friends and family for eight months during the year. When I was on the Nantucket lightship it was one of the old-fashioned, high-bowed schooners, but now the lighthouse board maintains a steamer there. Words are almost inadequate to describe the constant motion of the lightship. Being anchored over the shoal, the vessel is as helpless as a dismantled hull at the mercy of wind and waves. It simply reels and rolls and staggers around its moorings.

Now it is on the crest of a tremendous wave, now plunging into the valley, now rearing up on its stern, now pitching forward, now rolling—never for a moment, apparently, on an even keel. One morning when I was there, while the cook was frying pork for breakfast, the vessel lurched so that a piece of pork took a flying leap out of the pan and almost right into the mouth of one of the crew, who was snoring in his bunk. The man awoke, looked about him, saw what had happened, ate the pork and thanked the steward for his expeditious service.

On the Long Island and Jersey beaches and on some of the southern sands are the tall and graceful structures of which the Fire Island, Barnegat and Bolivar (Texas) beacons are good types.

The Carysport Reef lighthouse, off the Florida coast, is a typical coral reef light. It is built on screw piling, which is screwed down into the submerged coral and forms a skeleton foundation for the platform, on which rests the keeper's dwelling, and for the iron cylinder, which rises above this to the watch room and the lantern. A somewhat different type of screw pile light is the Northwest reef, while the South Pass is interesting, as being built on one of the famous jetties at the mouth of the Mississippi river.

The most noted light station on the Pacific coast is that of Tillamook rock, seventy miles south of the mouth of the Columbia river, Oregon. The rock rises in isolation to a height of ninety-two feet above the sea, yet the spray of breaking waves often is hurled higher than the summit, and the sea around the base of the rock usually is so turbulent that the keeper has to be lowered in a cage or basket and suspended in midair over the water, to report to the visiting lighthouse tender on the condition of himself and his assistants.

During one heavy storm a wave loosened two pieces from the side of the rock near the summit and hurled them on the roof of the keeper's dwelling. The weight of these fragments and of the wave tore a large hole in the roof and the wave flooded the building and knocked down two interior walls, throwing three rooms into one. The focal plane of the lantern is 136 feet above the sea, yet during one storm loosened pieces of rock broke eleven panes of glass three feet long and three-eighths of an inch thick and the light was put out by the waves.