THE NEW TUNNEL UNDER BOSTON HARBOR.

BEGUN IN 1900—COST $3,000,000—SIDES AND ARCH MADE OF CEMENT—FEW ACCIDENTS.

Boston, March 5 (Special).—Another link in the great rapid transit system planned for Boston and its thirty surrounding cities and towns is just about completed in the new East Boston tunnel, which connects the present subway and elevated systems of the city proper with the island district of East Boston, or, as it was known in Colonial days, Noddle Island, by a double track tube beneath the upper harbor. This tunnel is 7,460 feet long, 24 feet in width, and 22 feet from floor to roof. Some 2,700 feet of it are under water, and it cost $3,000,000.

In marked contrast to records of casualties, deaths and failures attendant upon the construction of tunnels, subways and great sub-aqueous ways in Europe, the East Boston tunnel has proved the most successful undertaking of its kind in the history of engineering. Only four lives were lost in the entire four years it has been under construction, and, aside from the explosion which caused these, the accidents have been few and trifling in comparison with those which have marked other great engineering enterprises.

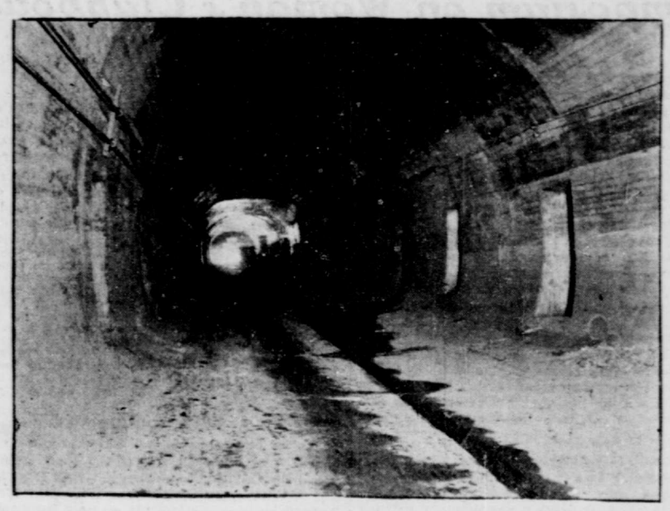
The finishing touches and cleaning up work are now going on, and within a few weeks the tracks of the Boston elevated road will be laid through the great tube and passengers will be whisked through to the other side by a three minute trip.

Out of the total spent for the work $1,500,000 was expended in boring and finishing the section under the harbor, which is 2,700 feet long. This is at a cost of a few cents over $405 a linear foot.

Cars will enter the tunnel by an incline in the centre of a great square, known as Maverick Square, pass under the old South Ferry slip, a short distance from the Cunard docks and emerge from beneath the water at Long Wharf. There is a slight bend in the centre of the tunnel under the harbor, imperceptible, however, to trolley passengers. The tunnel continues to Atlantic-ave., where the first station is. This is to be called Atlantic Chambers, and is near the State-st. elevated station. Passengers will reach the tunnel cars by great elevators, which, when the tunnel is opened, will convey a continual stream of passengers to the station platform. Then the tunnel continues up under State-st., through the financial district to the Old Station, the next one. The lower part of the old State House has been converted into a waiting room, with glazed tile facings, marble floors and steps and oak finishing. Another slight bend and the cars go on beneath Court-st. to Scollay Square, where they connect with the subway by a dead end track, passengers reaching subway cars and elevated trains by a staircase from the sub-station.

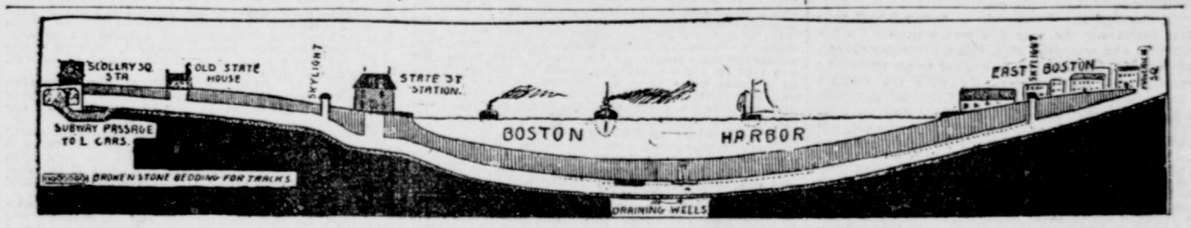
Eventually the tunnel system will be extended by means of a tunnel beneath Washington-st., or its immediate vicinity, for the use of elevated trains, which will be removed from the present subway to the second tunnel, plans for which are now being completed. These Washington-st. trains will connect with the East Boston tunnel, but no trains will pass through it, the elevated company reserving it for ordinary trolley cars. A third tunnel will be constructed after the completion of the Washington-st. route for trolley cars, to relieve the present congestion on Washington-st.'s surface. These two will be leased to the Boston Elevated, the same as the other routes, the rate being fixed at a percentage on the gross receipts of the elevated lines.

Boston's rapid transit system will not stop here, however, as the elevated is now planning to extend its overhead structure to Forest Hills, and the Transit Commission is planning for a subway in the West End, under a part of Beacon Hill, beneath Cambridge-st., through which the road will run trains to an overhead structure extending out to Harvard Square, Cambridge. All these improvements are rendered imperative by the rapidly increasing trolley traffic, which is placing a heavy burden on the present facilities and taxing the subway to far beyond its capacity. Every year sees new lines running from suburban cities direct into Boston, where previously they transferred passengers to the Boston elevated cars, charging an additional fare or transfer rate.

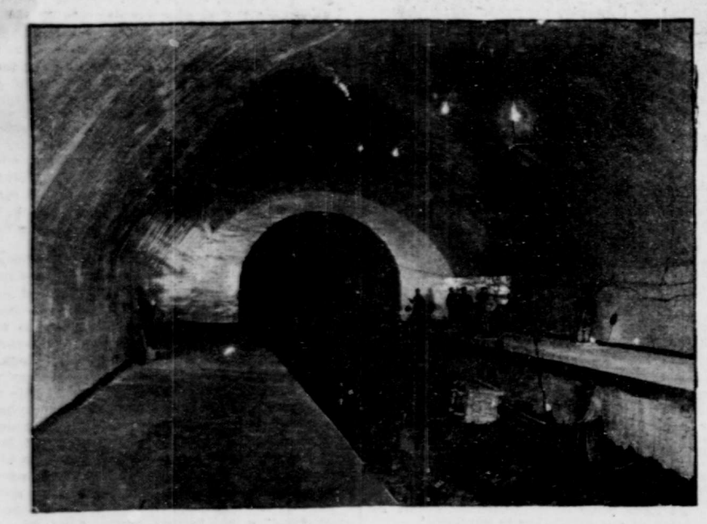


VIEW OF THE NEW TUNNEL UNDER BOSTON HARBOR, LOOKING TOWARD THE EAST BOSTON ENTRANCE.

Walls and arch are of concrete. The tunnel is 7,460 feet long, 24 wide and 22 high; 2,700 feet of it are under water.



PANORAMIC PROFILE OF THE EAST BOSTON TUNNEL.



PLATFORM AT THE OLD STATE HOUSE STATION OF THE EAST BOSTON TUNNEL. IT IS OF SOLID CONCRETE.

The new one is the first under-water tunnel in which concrete is used for the entire walls and arch. Iron segments lined with concrete, or cast iron plates, riveted into a complete tube, have heretofore been used. Brick was long ago discovered to be too porous and discarded for under-water construction. The walls and arch of the East Boston tunnel are about 33 inches thick, made of the best vulcanite Portland cement, about one hundred thousand barrels of which were used. There is no accurate estimate of the quantity of crushed stone and loads of sand used. Some original experiments were necessary before the engineers could go ahead with certain portions of the work, but the problems were successfully solved and some valuable statistics added to engineering knowledge.

Most of the subsoil cut through was a soft blue clay, and great care was necessary to prevent the stuff bursting in through the air chambers. Unlike the New-York subway, there were few open cuts. Such as were made were merely shafts, one sunk at the foot of State-st. in Atlantic-ave., one at the old State House, one in Court-st. and one in Scollay Square. These were all necessary because stations will be located at these points. Other than these, however, the work was all done underground by tunnelling, while traffic went on in the streets overhead unimpeded, except for the material dumped at different points. In fact, travel was impeded more by the heavy building operations going on at the same time in State-st. than by the tunnel work.

In all approximately 2,800,000 cubic yards of material was removed from the tube, of which 2,200,000 was from beneath the harbor portion. This material was utilized largely in filling in flat lands along the South Boston harbor front, which the State is converting into piers and waterfront property of enormously increasing value.

Little difficulty was experienced with the myriad of wires and pipes of all kinds encountered when the construction work struck State-st. The wires were all carefully gathered to one side, and as the tunnel was completed were assembled in an ingenious system of ducts at one side, properly insulated and separated according to their use. They are reached by manholes from the street, so that repairs to them will never interfere with tunnel traffic.

Under the harbor an air current is provided by a new ventilating system, air being pumped from the East Boston side and distributed through the tunnel by spaces cut into the walls to a specially built air chamber. The cars rushing back and forth, with the ventilating pumps, will give as free and pure a current of air as is now secured in the subway, a marvel of airiness and even temperature. The tunnel will be lighted throughout by a multitude of incandescent lights. The stations are all finished in white marble and white tilings, with handsome marble stairs and balustrades. The platforms are of concrete, blocked solidly in great sections. The fittings of the elevated company's offices, ticket windows, etc., will be in handsomely fitted oak and white enamel painted wood, the metal work of brass or bronze.

Passengers going either way will be required, in addition to the regular fare of five cents fixed by the special tunnel act of the legislature, to pay a toll of one cent, just what is charged on the ferries. This is collected by the company, but is turned over to the city treasury, to be applied to the interest on the tunnel bonds and the sinking fund for their redemption. There has been considerable complaint over this, but the matter was fixed by the legislature, and no litigation is expected over it when the public fully understands the purpose of the tax. Passengers coming from other parts of the city through the tunnel will have the same rights and privileges as to free transfers as they now enjoy.

The rental charge of the East Boston tunnel to the Boston Elevated Company is three-eighths of 1 per cent of the gross earnings of the company. Figuring on the company's gross earnings for the year ended September 30, 1903, namely, $11,959,514, the annual rental would be $44,859. The rental charge for the present subway paid by the elevated in the year ended June 30, 1903, was $213,362. The above figures are likely to be somewhat increased, owing to the constantly and enormously increasing passenger traffic.

As there is no competing company in Boston, the elevated company controlling all lines within the city and a majority of the suburban lines, no bids were advertised for rental of the subway and the tunnel, as no other company could make use of them effectively, and the rental was fixed by the legislature after thorough investigation by the Railroad Commissioners as to what would be an equitable charge.

The following are the figures of the East Boston tunnel:

Length—7,460 feet.
Under water—2,700.
Lives lost—4.
Began—May 5, 1900.
Practically completed—January 1, 1904 (except for minor finishing touches and work of Boston Elevated).
Approximate cost—$3,000,000, or $405 a linear foot.
Under harbor portion—Cost, $1,500,000.
Distance (Section B, so-called)—4,351 linear feet.
Width (for cars, with space between)—24 feet.
Depth (floor to roof)—21 feet.
Amount of earthy material, etc., excavated—Approximately 2,800,000 cubic yards.
Amount excavated from beneath harbor (Section B)—Approximately 2,200,000 yards.
Material used in construction—Concrete, with steel only for station structure. First tunnel ever built wholly of concrete.
Barrels of cement required in whole undertaking—100,000.

"THE HERB OF PEACE."

Continued from first page.

cigar as that great master of pulpit eloquence, Charles Spurgeon, who, indeed, described it on one memorable occasion as a subject for devout gratitude to Providence. Presbyterian divines are not averse to the fragrant weed, while the old Puritan ministers in the mother country, as well as in New-England, found, like Hugh Peters, much solace in their pipes. That the latter should have received the name of "churchwardens" may be accepted as an illustration of the fact that tobacco does not clash with religion.

But it is in politics and in diplomacy that tobacco could least be spared, and I sometimes wonder if those who, like Dr. Seaver of Yale, are accustomed to wax eloquent on the subject of the alleged pernicious effects of the "weed," realize the important role which it has played during the last two hundred years in the history of the world, its influence upon the course of public events having been almost invariably of a beneficial character. Not only have its narcotic propensities tended to soothe the angry passions of those intrusted with the conduct of international relations, but it has also afforded them the opportunity of thinking before they spoke, and allowed time for those second thoughts which in statecraft, at any rate, are always best. People are often disposed to make fun of the so called "pipe of peace" and to regard it as a mere form of speech originating with the red Indians. But tobacco, whether taken in the form of a pipe, a cigar, a cigarette or snuff, has proved a powerful and effective aid to peace, and as such its use deserves to be fostered and propagated by all patriotic and law-abiding citizens, in lieu of being condemned as noxious. The value placed by people in the eighteenth century and in the early part of the nineteenth upon snuff as a preventive of violence is shown by the German historian Jacoby, who, writing of his times, declares: "Whenever any one displays signs of temper the snuffbox is handed to him, and we all have too much self-control, even under the most trying circumstances, ever to resist the power."

Even women in those days who did not take snuff kept boxes for the purpose of averting quarrels among their admirers, and it was universally regarded as one of the most efficacious aids to the maintenance of friendly and agreeable intercourse. Nowadays snuff has gone out of fashion, and, although during Lord Rosebery's tenure of office as Minister of Foreign Affairs I recall that a man was sentenced to six months' hard labor for purloining his gold snuffbox from off his desk, yet as a rule cigarettes have supplanted tobacco in its powdered form in what the late Lord Ampthill was wont to describe as "diplomatic machinery." The statesman or the ambassador who could formerly conceal his embarrassment and collect his thoughts for an appropriate answer during the slow and stately process of taking a "prise," is now enabled to do so while breathing out nicely distanced rings of fragrant Turkish tobacco. Indeed, the cigarette proves perhaps a more effective ally in a moment of difficulty than the pinch of snuff. For whereas you cannot indefinitely prolong the process of inhaling the latter, it is always possible to gain time with a cigarette by letting it go out and then having to relight it. To-day there is scarcely any foreign minister or diplomat who is not provided with his cigarette box, which he regards, not in the light of an object of personal luxury, but as part and parcel of the most indispensable paraphernalia of his office.

It is worthy of note that the Russians, who devote more attention and importance to the study of diplomacy than any other Western nation, are always provided with finer cigarettes than any of their foreign colleagues, while one of the reasons why the late Khédive was subjected to so much bullying and badgering by the various ministers and consuls accredited to his court was because his cigarettes were so execrable that it required the strongest dose of courtesy possible to make even a pretence of smoking them, the result being that he had to bear the full brunt of every disagreeable first thought that came into the mind of his foreign visitors, his cigarettes offering no inducement for them to reflect before speaking, and tending, moreover, to irritate rather than to soothe their tempers.

It is a peculiar fact in this connection that all women who have achieved fame in diplomacy, such as Princess Pauline Metternich, Princess Lise Troubetskoi, the late Princess Leopold Croy, Mme. de Novikoff, etc., have all been inveterate consumers of cigarettes, and each of those just mentioned has availed herself with signal advantage of the opportunity afforded by toying with a fragrant papilletto to reflect before speaking, which women, as a rule, alas! so seldom do. Apparently it is with the hope of encouraging women who are not, like Mme. de Novikoff and Princess Lise Troubetskoi, professed diplomats, to think before speaking, and thereby avert a goodly portion of the trouble which befalls man, that several of the governments of Continental Europe are encouraging the use of tobacco among the fair sex by providing smoking apartments for women on all the state railroads. And we even find that solemn and august functionary, the Speaker of the British House of Commons, the living embodiment of all that is most time honored, old fashioned and ultra respectable in English Parliament, turning a deaf ear to the protest raised of late years in certain of the London newspapers against the now frequent spectacle offered on summer nights of women in full evening dress sitting out on the riverside terrace of the palace of Westminster puffing away at their post-prandial cigarette. "The First Commoner of the Realm" is, like his predecessor, Lord Peel, apparently of the opinion that the weed, first dedicated to England's "Virgin Queen," is infinitely more effective and less injurious to high strung feminine nerves than chloral, morphine or alcohol. The easiest tempered and most tractable women of the universe are those of the Orient, who smoke all day long, and the same may be said of the women of Southern Europe. With the exception of the present Czarina of Russia, Queen Alexandra and the Queen of the Netherlands, nearly all the women of the reigning houses of the Old World smoke. The court of Denmark, especially during the lifetime of the late Queen Louise, has always been one of the most strict on the score of etiquette and propriety. Yet most of the royal and imperial ladies who assemble there each summer at Fredensborg smoke, not only within the precincts of the palace, but even in public, as for instance one evening at a dinner in the colonnade of the Tivoli Restaurant at Copenhagen. In Austria Archduchess Mathilde met with her death through her muslin dress catching fire at Schoenbrunn from her cigarette. While in England the King's daughter, Princess Charles of Denmark, and his sister, the Duchess of Argyll, make no pretence of concealing their fondness for cigarettes.

One of the objections which has been raised to women smoking is that, were the habit to become general, "it would not be confined to ladies." As one critic has it, "the dainty little cigarette with which Lady Judith calms her aristocratic nerves would find its counterpart in the brierwood pipe of Betty, the parlor maid, and in the 'cutty' of old Judy, the cook." But surely the advantages of calming the chambermaid and of soothing the notoriously irritable temper of the cook by means even of pipes are quite as obvious as the necessity of quieting by means of cigarettes the tendency to "ramp," the restlessness and the needless talk of their mistress.

EX-ATTACHE.

HOW SALMON RUN IN ALASKA.

Imagine yourself on the seashore in Alaska. In the month of September, rambling on for the pleasure of it, and picking up a curious shell now and then. You see ahead a fresh water stream which is in your path. As you approach you are surprised to find the whole stream filled, crowded, with struggling salmon. If you follow the stream back from the shore a mile or so, you will find it literally packed with salmon all the way, although the water is so shallow that no fish is more than half covered. Your surprise is increased when you approach near enough to touch them with your foot, and find that they pay not the slightest attention to you. They struggle fiercely on up the stream, the females to deposit their eggs, the males to protect the females. All are intent upon that mad, suicidal rush up the stream. It is suicidal because not a single salmon out of those hundreds before you ever comes back alive. From the outset they neither eat nor rest, and as you follow them upstream you soon see the effects of their battle. Their flesh is knocked off against the stones; here you see one striving desperately against his fellows, with nothing left of his once powerful tail but the bones, and many of them are broken; the flesh may be falling from his back or torn from his belly, still he fights on until death. If it is a female you may see the eggs dragging from an ugly gash in her side, one fin is torn off, two more are useless, every effort to propel herself leaves a trail of blood, but she swims on with the rest.

You are sickened by such a sight, and conclude that the shallowness of the stream will account for the condition of the fish. So you go to a larger stream, thirty feet in width and eight feet in depth; here you find thousands of salmon lashing the water into foam in their efforts to distance one another. They are swimming packed layer on layer, like sardines. Here the conditions of the smaller stream are repeated on a larger scale. The fish are not only torn to pieces by rocks, but destroy one another. If you pick up ore that appears whole he will fall to pieces of his own weight.—(Good Health.

SOME STRENUOUS LIFE.

What a College Man Had to Relate of Experiences on Sea and Land.

To belong to a college club in this city means perhaps abundant opportunity to drape one's self across a cavernous leather chair better than he has at home, to cross his legs over an inch thick red carpet, or to peck at food with blue willow ware, real silver and hooded candles about, but such membership presupposes more than these things. The compelling virtue of such a place flows out of the forces which go to revitalize friendships born and matured on an elm hung campus—associations which may have been faintly vitiated through years and long distances.

Let a man be absent from his mates for five summers and suddenly meet twenty of them at his club; his dinner and his poking at the blazing logs with them are to him uncommonly sweet communion; to them, his report is always interesting, and sometimes, if he has been a wanderer, absorbing.

Such a wanderer casually dropped in at the B Club, in West Forty-fourth-st., last Friday evening. His report ran quite like this:

"I tried ranching in Wyoming at first," he said, "but after a year digging irrigation ditches I couldn't get any water. So I sold my ranch, and, after a summer cowpuaching, horse wrangling, managing a hotel, joining a board of trade, serving as volunteer fireman and editing a weekly newspaper—all in one summer—I ran across 'Tommy' Jenks, '96, whose father, you know, is one of the biggest cattlemen in St. Louis. We decided to leave the West altogether, and to go abroad, eventually to go around the world, before settling down to business for life. So we went to St. Louis, and there I met Jenks, sr., who didn't like our plan a bit, and wouldn't give 'Tommy' a cent. My $500 was a pretty slim allowance for two men pledged to put through a 27,000 mile trip, but we thought we could do it on that amount.

"Jenks, sr., we outwitted by getting his manager to hire us as drovers to take 150 head of cattle from Boston to Glasgow on a British tramp, the Southland, 2,300 tons, 390 foot.

"There were three other drovers besides Tom and myself. Two days before we sailed Tom telegraphed his father what we were doing, and, graciously enough, the latter, relenting, wired he'd allow us $300 apiece, besides our wages, if we got his cattle safely across. You see, it was the winter season, the shipment was practically an experiment and known to be pretty dangerous, but we would be in England with over $1,000 if we succeeded.

"It was my first experience at sea. The 150 head of cattle, freight at 50 shillings a head, cash paid in advance, filled all the available deck room, both forward and aft. Each steer, according to contract, got a pen 8 by 2½ feet in size, with water and feed under deck sufficient, we thought, to keep them up to their average shipping weight of close on to 1,500 pounds. The rest of the ship's cargo seemed to me mostly cotton, wheat and foodstuffs, bound, like the beef, for the stomachs of British soldiers.

"Fourteen hours out rough weather came on, which lasted from January 15 to the 20th. We shipped heavy seas, lost our starboard weather rail, and it wasn't long before a lot of the cattle stalls broke down. On the night of the 16th ten steers were washed overboard. In the morning we found others drowned on deck, and many more badly crippled from being hit by the seas, by floating timbers from the pens and by rolling against one another. On the 18th, the storm holding and increasing, we couldn't get on deck to feed or water them, and they died all the faster.

"It was a rummy thing to do, but the captain was in command and we saw no use of objections. Fearing the storm he made us jettison all the cattle still living. He said, too, he thought they'd tangle up his rudder deck chains. Over they all went, including twenty or thirty partially protected forward by the forecastle hood.

"On the 20th, when the weather slackened and the water died down, we had no cattle left. With them went the $300 a piece which Tom and I were to have received for our share.

"After seeing England and Paris we got enough of our 'round the world plan and started home. Neither of us wanted to cable for money, so we shipped again, just for form's sake, Tom as supercargo and I as able seaman, on another tramp bound for Pascagoula, Miss., each of us paying $50 for our passage and berths in the captain's cabin.

"Sixteen days out we passed the Bahamas and Alligator Reef on the Florida Coast. The deep blue of the Gulf Stream was changing to the grass green of the coral beds when Tom hustled out of bed one still, hot morning to show me what proved to be, away off in the haze, a burning bark ashore on a reef. The sea was smooth, and that settled any doubts in our minds. We bought for cash from the captain one of the tramp's "prams," a solid Norwegian fishboat he'd found years before in the Baltic, and away we sailed, on salvage bent, for the bark. The thing promised excitement and to add to my list of professions and trades that of a wrecker was surely worth while.

Six hours brought us to the bark, which was smoking fore and aft. All except the poopdeck had fallen in. The boat was deserted, and we hacked down her foremast, the only thing standing, and cut two holes in her sides to let her fill. She was burned to the waterline, but we were anxious to get into her hold. Luck was with us; she settled, rested fairly easy, and we got the fire out.

"We found four hundred bales of cotton in her hold—cotton that was all our own if we could save it.

"We put her anchors out to keep her from drifting in a storm then brewing, and which looked like bad times for us. Then we ran in to shore. Travelling overland we found fishermen's huts, hired six smacks and crews on the promise of a good percentage, returned to the reef and found our bark split up and the cotton down in five fathoms of water.

"We had good weather, and stayed there, off and on, two weeks. By means of dragging and naked diving we saved three hundred bales. These we sold later in a Florida town, paid our men off, and realized splendidly on our find. We found out later that the bark lost her route because her captain didn't know a light nearby had been increased from a lens lantern to a fifth order light. I supposed at first he'd beached her because of the fire in his hold."

"What are you and Tommy Jenks going to do now?" the speaker was asked; "hogs, lard, cattle, wrecking or what?"

"Neither," he answered. "Last month we bought a seat on the Cotton Exchange in New-Orleans. We got in when the market was down, and we've done our little part in keeping it up ever since.

"You see," he added, half apologetically, "Tom let me off for a week so that I could take the little girl back with me."

NEW COMPLEXIONS FOR OLD.

Yet one more example of the ridiculous lengths to which vanity and weakness may be tempted by the blandishments of a quack appeared recently in the columns of a daily paper, in the form of an article purporting to recount the sufferings and other experiences endured by a woman who, not being satisfied with the beauty of her complexion, had undergone "the wonderful operation of removing the skin of the face." However, it appears that an altogether unaccountable attack of modesty on the part of the operator induced her at the last moment to rest satisfied with merely blistering off the epidermis and leaving the skin behind.

The method employed was as follows: The face was first painted with cocaine to deaden the smart (a procedure which of itself displays the ignorance of the operator), and then smeared over with blistering fluid and covered with strips of plaster. As one might have imagined, the result of this so-called beautifying process was, we are told, painful in the extreme, the face swelling to twice its natural size and the patient having to take her tea from a feeding cup, as her mouth "seemed to have disappeared."

We fancy that no one in the possession of her mental faculties would be likely, at any rate after reading the article referred to, to present herself as a candidate for such an operation. But vanity is a strange leader, and therefore it may be as well to point out, for the benefit of those who are disposed to be discontented with their own natural charms, that the operation of having the face blistered all over is attended with grave dangers of erysipelas and other infections, and, moreover, that the usual effect of blistering is to leave the skin more pigmented than it was before.—(The Hospital.

SEEKING HEALTH, THEY DIE FROM NEGLECT.

SAD CONDITION OF MANY DESTITUTE CONSUMPTIVES IN NEW-MEXICO DESCRIBED BY A WOMAN.

To the Editor of The Tribune:

Sir: There are many evils for redress, and those immediately under our noses are the most likely to be corrected. But that is one which every other part of this vast country is daily shoving off on the Southwest, unconsciously creating a state of affairs out here the enormity of which only those on the spot can realize.

It is true that this climate is the best in the world for tubercular trouble of every form; it is true that a patient sent here in the earlier stages of the disease's development has a fair chance for life. But it is also true that nine out of ten tubercular patients sent here have the climate alone in their favor, and everything else dead against them.

The only ones who have any show at all are those who come at the very first indication of trouble, so that they are able to work without expending essential energy, or those who are amply supplied with money and can afford every care and absolute rest.

The instructions given by the average Eastern physician would be ridiculous were the results not so sad: "Rest all you can until your strength permits exercise; take plenty of nourishing food, especially milk and fresh eggs. I don't think you will need a physician. The climate is the main thing."

This, or its equivalent, is the manual with which literally thousands of men and women pour into these Southwestern cities. The unfortunate creatures usually have the impression that in a few months they will be able to work again, and the people at home are equally duped.

The facts are that a consumptive with even slight fever should not exercise at all; that milk and eggs and all other provisions are very high in these parts, and that all consumptives should be under a doctor's constant supervision, to prevent those mistakes which are so often fatal to the most promising cases. The consumptive is not exempt from life's ordinary small ailments, and because of his limited energies these troubles, nothing to a well person, are often most serious handicaps for him.

I could enumerate case after case of heart-breaking suffering due to the present state of affairs. The people of this region do all they can, but the problem is too large for them, and does not belong to them, anyhow.

Young men die in the street for lack of a place to go to. They have come down here with a few hundreds, and when their money is gone are utterly unable to work, and oftentimes quietly starve. The janitor of one of the city schools several times found a window open when he came to his work in the morning. Not long since he arrived at the scene a little early, and found a respectable looking man lying on the floor wrapped in the school flag. "What are you doing here?" he asked. "Getting a night's sleep," replied the por fellow. Further inquiry revealed the fact that he had worked till he was turned off as too ill and had not money to go home, or so much as pay for a lodging. For his food he was dependent on chance charity. He had come out here in fair condition, and under proper care might have so advanced as to be a useful citizen, but every day of exhausting toil carried him further from hope of ultimate recovery.

A friend of mine, a working man, gives another man $1 50 a week, to pay the rent of the unsanitary hole where he sleeps. The beneficiary was an Eastern editor, well educated and travelled. His people at home are not well to do, or he does not let them know of his fearful straits, but dying by inches, living a dog's life on the charity of men not much better off than himself.

Another man was found in a freight car not long since, starved to death. The town and the railroad fought over who would have to bury him.

Many boarding house keepers will not take the very ill, and they turn out those who are rapidly going down. One poor chap died in the hack while vainly seeking a place that would take him in. The woman who kept the house where he roomed simply told him, "I'm sorry, Mr. K., but you're too sick. You'll have to find another place." It sounds harsh, but, after all, her home was not a hospital.

Few of the lodging houses have board as well. The result is that around meal time hundreds of wretched creatures, unfit to walk, are seen crawling between their rooming places and the restaurants or boarding houses.

Many a person has been found dead in bed by the caretaker with evidences of hemorrhage, or perhaps heart failure. I am putting things very mildly. Volumes could be written of the unutterable misery endured by sick people, young and old, thousands of miles away from home, alone and uncared for.

In such hospitals as they have out here the treatment is very costly, and even if they have a charity clause in their charters it is practically null and void. I have in my possession bills presented by the local institution to penniless patients, who were warned that they must clear out if unable to pay. The charges for the most primitive care exceed those of the best New-York hospitals for day and night nursing.

It is clear that the only remedy for this state of affairs is the building of a dozen good sanatoriums in this dry land, where those who can pay a little or nothing at all can have a fair chance for life.

If private individuals of means will not do this the government should. As a matter of economy it would be a wise step. Over one hundred thousand lives are sacrificed every year to this white scourge, simply because no one makes it his business to fight the thing intelligently.

If there were a system of sanatoriums through the Southwest, doctors could send out their patients at the first symptoms of the disease, with a good hope of complete recovery.

As it is, it is not to be wondered at that patients postpone to the last moment the hazard of coming out to the fearful uncertainties of life here under prevailing conditions, and thus lose their only chance.

The present unsystematic, stupid way of dealing with this disease is infinitely more costly to the country than the suggested system of sanatoriums would be.

If the government will not undertake such a work—far more necessary than smallpox refuges—will not some man of means seize this unparalleled opportunity to help his suffering fellow men?

(Mrs.) CHARLES BIGELOW FORD.

Albuquerque, N. M., Feb. 23, 1904.

ENTRANCE TO EAST BOSTON TUNNEL FROM MAVERICK SQUARE.

Cars from Chelsea, Orient Heights, Winthrop and the new Metropolitan Boulevard, with all East Boston lines, will enter here for the city proper.

COLOR-BLIND PEOPLE.

Some Queer Selections Made by Persons Thus Afflicted.

A well known oculist, who has an office in West Seventh-st., while discussing some of the various defects of the human eye which are not noticeable to the ordinary observer, had this to say about color blind people:

"The world must be a curious place to color blind people, of whom there are forty males and three females to every 1,000 persons. Some are blue-yellow blind, and everything seems either red, green or gray to them; others are red-green blind, and all things appear to them to be yellow, blue or gray of various shades, and others again perceive no distinction of color at all, but the whole world wears an unchanging aspect of dull gray.

"To these last a visit to a picture gallery would reveal merely a collection of engravings or photographs. But the two former have the compensation of seeing their own two colors much more brightly than ordinary people.

"The color blind do extraordinary things at times. An officer of the navy went one day to buy material for a coat, vest and trousers. He bought a blue coat and red trousers, believing them of the same color. A British admiral painted a landscape, and was very proud of his performance, but he made the tree red, thinking it was the same color as green. When he purchased a pair of trousers he chose green ones, suspecting them to be brown.

"An architect's pupil, being directed to copy the picture of a brown house, made the house green, the sky scarlet and the roses blue.

"A postoffice clerk was always short in his accounts because he could not distinguish the different colored stamps. And a sedate Quaker has been known to buy a green coat for himself and a red gown for his wife, thinking they were both brown.

"If you see a man in the street with a preposterous display of colors, charitably believe him to be one of the color blind.

"Just why the eyes of women are less defective in the matter of distinguishing colors than those of a man is one of the things in nature that is unexplained. The construction is the same, yet woman's superiority in matching colors has always been recognized, even where man has had the advantage of long experience."—(The Cincinnati Commercial Tribune.

BORROWING MONEY BY WIRELESS.

To borrow money from a ship one hundred miles away would have been an impossible feat a year or so ago, but recently it was accomplished by telegraph. A young man found himself aboard ship, homeward bound, his passage paid, but without money for incidental expenses and for landing. He knew that his mother was on an eastbound ship. The probable date and hour of the meeting of the two vessels were calculated. The purser of the eastbound ship was instructed to lay the unfortunate's case before his mother. It took only a few minutes for her to place money in the hands of her purser, who instructed the purser of the westbound liner to pay it to his passenger. The charge for transmitting messages from ship to ship at sea is sixpence a word, with the address and signature free.—(The World's Work.

THE CASPIAN SEA.

One of the most remarkable physical features of the globe is the deep and wide depression in the hollow of which stands the Caspian Sea, and near to it the Sea of Aral. The Caspian is nearly as large as France, and its surface is eighty-four feet below the level of the Black Sea. The Sea of Aral is nearly as large as Ireland, and is very little over the sea level. Within recent geological times the vast expanse in which these lakes are found was sea. Its floor has been gradually raised, and the waters filling the depressions are all that is left of an ancient Mediterranean. A strange feature of both bodies of water is that, although they receive large rivers, especially the Caspian, into which the Volga, the Ural River and scores of streams from the Caucasus flow, both have for many years been getting shallower. Evaporation, for they have no outlet, exceeds the inflow. But, for some climatic reason probably, like Lake Aral and its neighbor, Lake Balkhash, have since 1891 been increasing in depth. "Nature" reports that M. Berg visited Lake Balkhash last summer, and found that the level was rising with comparative rapidity. Whereas the Caspian, like the Dead Sea, is very salt, owing to the rate of evaporation, Aral and Balkhash are brackish only. These remnants of what was once a great sea opening into the ocean, as the Mediterranean does now, still contain marine fish and seals. Some of the latter survive in the Aral and Baikal lakes, having gradually become fitted for their habitat, though it is no longer salt, but merely brackish, and, in the case of Baikal, actually fresh water.—(London Telegraph.