The Canal Across the Republic of Nicaragua.

Its Early Completion Now a Certainty.—How It Will Affect Commerce.—Description of the Proposed Great Inter-Oceanic Waterway.

The construction of the Nicaragua canal, work upon which is now certain to be resumed within a few months, and pushed to a completion, will be an event of more than continental importance, and in its general bearings not without its effect upon trade.

While the present immediate motive which is leading the government to desire the construction of the canal is largely military, the commercial advantages which we will reap, as a result of its operation cannot be overestimated. The quickness of communication which will result between the American Pacific and Atlantic coasts, between New York and China, will enable the United States to exercise far more influence in the commerce of the

East than it has heretofore done, and will necessarily divert some of the trade which now finds its way across the continent by Canadian railroads and from Victoria and Vancouver by Canadian steamships, to the cheaper all-water route from New York and other American cities, which will be opened up when the canal is completed.

That the canal will be built, and completed within a very short time, there seems to be no doubt whatever. Diversity of opinion prevails at Washington as to how the work shall be undertaken, but there is evidently a common consensus that it should be built at once, and that the government should control it.

Whether the Clayton-Bulwer treaty is still binding or whether it has become virtually abrogated, are questions on which public men differ. Many members of congress believe that the treaty is still vital, and these suggest a joint control of the canal by the two countries, following a joint equal expenditure to defray the cost of construction. The majority of the members, however, are opposed to any joint ownership, and would seek the

BREAKWATER AT GREYTON.

abrogation of the Clayton-Bulwer treaty either by the friendly consent of Great Britain, or by diplomatic arrangement with that country.

Of course, the recent war with Spain, with its incident of the famous voyage of the battleship Oregon around Cape Horn, has been the incentive to the present determination to build and control a canal across the isthmus. Had the construction of the canal been a matter of days or months, rather than of years, there is no doubt that all obstacles would have been swept

HOW THE CANAL WILL SHORTEN DISTANCES.

away by congress with the same expedition that marked the annexation of Hawaii, and the money to pay for the work would have been forthcoming from the people with the same promptness and generosity that marked the sale of the war bonds.

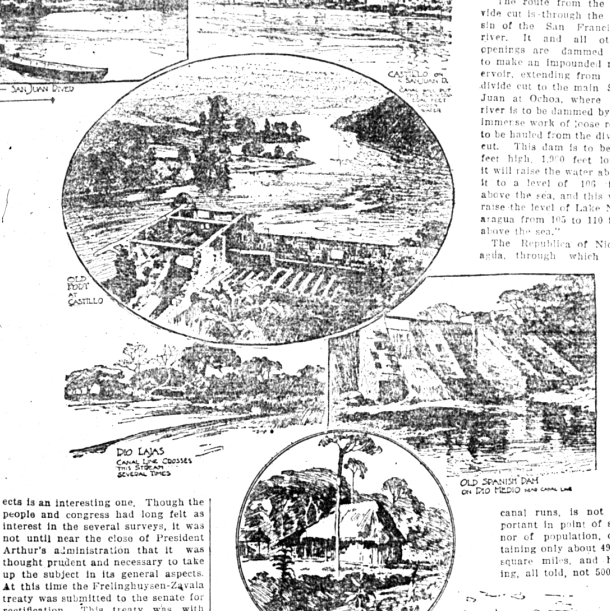
There is nothing new in the proposition to connect the Atlantic and Pacific oceans by a waterway. Twenty-one concessions have been granted by the governments of Central America for the construction of a canal, and four of these to the United States. The negotiations of the latter government have covered a period of nearly eight years, and have been participated in by every president since and including Mr. Monroe. Numerous elaborate and expensive surveys, with full details of every route proposed, from Mexico to Columbia, have been conducted by the United States to discover the best practicable route, and these surveyors have concurred in the opinion that the route by way of Lake Nicaragua is the best.

The history of Nicaragua canal projects is an interesting one. Though the people and congress had long felt as interest in the several surveys, it was not until near the close of President Arthur's administration that it was thought prudent and necessary to take up the subject in its general aspects. At this time the Frelinghuysen-Zavala treaty was submitted to the senate for rectification. This treaty was with Nicaragua; and the United States, according to its stipulations, had an opportunity to secure control over an area of country twelve miles wide through which the canal, projected in that instrument, was to be constructed. In return, the United States proposed to pay to the government of Nicaragua $4,000,000.

The provisions for the construction, maintenance and protection of the canal under the Frelinghuysen-Zavala treaty were full and complete. A majority of the senate favored its ratification, and possibly the necessary two-thirds might have been secured for it ultimately, had President Cleveland not interfered. The president, however, was opposed to the bill, believing that this treaty violated the Clayton-Bulwer treaty of 1850, by the terms of which the United States solemnly promised to take Great Britain into partnership in building a canal at any future time.

The failure of the Frelinghuysen-Zavala treaty was a severe disappointment to the friends of the canal project, but it did not discourage them. A company of private citizens, capitalists and promoters, was organized, which at length took the name of the Maritime Canal Company. Fair and full concessions were secured from the government of Nicaragua, while similar articles were also signed with the republic of Costa Rica.

In due time congress was called upon to grant a charter to the Maritime company, which asked nothing more than this, being then quite confident that it had ample resources to prosecute this important work to a successful finish during the ensuing ten years. The charter was granted on these terms, but in January, 1890, a request was made for a government guarantee of the bonds of the Maritime company to the amount of $100,000,000.



Congress, however, did not guarantee the company's bonds. The company, without such guarantee, was unable to raise the necessary capital, either in the United States or abroad, and the financial crisis of 1893 so overwhelmed it that all active operations on the isthmus were suspended, and they have never been resumed. The same issue, the guaranteeing of bonds, has come up from time to time in succeeding congresses, and is still an issue between the government and the company.

The principal objections to the bills which the friends of the canal company have offered during the past eight years have been, that they trenched upon the rights of Nicaragua and utterly repudiated that solemn instrument, signed by Great Britain and the United States in 1850, the Clayton-Bulwer treaty.

The abrogation of the Clayton-Bulwer treaty was attempted by President Buchanan in 1858, and by Secretaries Blaine and Frelinghuysen in the early eighties, but with little success. Buchanan withdrew from his position when Lord Napier suggested that Great Britain would agree to the abrogation in the event of the United States formally recognizing the status quo of 1850, which would be tantamount to a ratification of Great Britain's claims to British Honduras, the Mosquito Coast and the Bay Islands.

Blaine and Frelinghuysen labored in vain, with theoretical arguments and historical objections, to convince Lord Granville that the instrument was without validity. Lord Granville refused to be convinced, and furthermore President Cleveland, by promptly recognizing the treaty, on coming into the presidency in 1885, quite sustained the British contention.

Today some of the most learned international lawyers in the United States maintain that the old treaty is valid and binding, at the same time confessing the confident belief that in all probability Great Britain is quite as willing that it should be abrogated in the proper way, relinquishing her right under it to share in the construction, control and protection of a maritime canal through Nicaragua, as the United States are to have it done.

The Route Described.

Considerable work has already been done by the Maritime Company on the projected canal. The route is from Greytown, on the Atlantic, to Brito, on the Pacific, a distance of 169½ miles apart.

"In detail the line of the canal extends from Greytown in a southeasterly direction 9.25 miles through the low grounds of the heavily wooded plains and swamps. The cross section of the canal here is to be 120 feet wide at bottom, 288 feet at surface, and 28 feet deep. Lock No. 1 will have a lift of 31 feet; dimensions of lock, 650 feet by 80 feet. Lock No. 2, 1.25 miles from No. 1; lift, 30 feet. Lock No. 3, about two miles from No. 2; lift, 45 feet. About three miles from No. 3 is the eastern divide cut, 2.9 miles long; summit depth of cut, 298 feet; average depth entire length of cut, 141 feet; material mostly rock; dimensions of the cut, 80 feet at bottom, 80 feet at surface; depth of water, thirty feet.

"The route from the divide cut is through the basin of the San Francisco river. It and all other openings are dammed up to make an impounded reservoir, extending from the divide cut to the main San Juan at Ochoa, where the river is to be dammed by an immense work of loose rock to be hauled from the divide cut. This dam is to be 70 feet high, 1,900 feet long; it will raise the water above it to a level of 105 feet above the sea, and this will raise the level of Lake Nicaragua from 105 to 110 feet above the sea."

The Republic of Nicaragua, through which the canal runs, is not important in point of size, nor of population, containing only about 49,000 square miles, and having, all told, not 500,000 people. Located almost under the equator, it is purely tropical in character and products.

The natives of Nicaragua are Spanish-Americans and Indians, in about equal numbers, and having little incentive to exertion, are not more disposed to industry than the inhabitants of other tropical lands.

Although work on the canal was suspended in 1893, much has already been accomplished on the lower portion of the San Juan river. For forty miles the canal does not follow the course of the river, but progresses in a straight line directly west through the swamp.

The estimates of cost of constructing a canal across Nicaragua are widely divergent. The Maritime Canal Company stated that the canal, complete for navigation, would cost less than $75,000,000, the Ludlow board placed its cost at not less than $135,000,000 under any circumstances, and under certain conditions at $150,000,000, and it is believed that the present canal commission will report $125,000,000 as amply sufficient to complete the work.

There is an inevitable tendency to dispute even the highest of these estimates as being too small, when it is remembered that the $10,000,000 Suez canal actually cost $100,000,000, and on the $120,000,000 Panama canal the enormous sum of $350,000,000 has already been spent.

Selling Papers on the Roof.

Not all the enterprising newsboys are in the United States. The small street merchants of Paris, when forbidden to enter the cars and omnibuses, got over a serious difficulty in real Yankee fashion. It was easy enough, of course, to sell papers through the windows to people seated in the vehicles; but how was it possible to reach would-be customers perched on the imperiales, the seats provided on the roof? A youth promptly solved the problem. He procured a stick seven or eight feet long, with wire clamps fastened to the sides. Papers were put in the clamps. On the top of the stick there was a small cup with a hole in the bottom. The hole was a very important part of the apparatus, for it reached all the way down; and through it came the copper coins of one or two sous, according to the price of the paper, which the patron selected when the boy held up the stick.

There are six schools in Ireland where Irish is taught.

A Curious Sentence.

The following curious sentence, "Sator arepo tenet opera rotas," is pretty bad Latin, but may be freely translated: "I cease from my work; the sower will wear away his wheels." It has these peculiarities: First—It spells backward and forward the same. Second—The first letter of each word spells the first word. Third—The second letter of each word spells the second word, and so on with the third, fourth and fifth. Fourth—The first letters, read backward, spell the first word, the next to the last, the second word, and so on throughout. Fifth—There are just as many letters to be found in each word as there are words.

Paper Sails for Ships.

A process has been discovered by which sails of vessels of all kinds can be made out of paper pulp, and it is claimed that they serve quite as well as canvas and are very much cheaper. They swell and flap in the wind like the genuine old-fashioned article, and are supposed to be untearable.

Sterilized Milk Utensils.

Milk from a healthy cow is, in the first instance, absolutely free from bacteria. It becomes contaminated in the mere process of milking, and so admirably adapted is milk to bacterial growth that in a short time it is swarming with minute forms of life. Let us consider whence these are derived. Of first importance are the vessels in use. A momentary application of boiling water or steam is insufficient to destroy germ life, says the Contemporary Review, to be effectual it is necessary to expose the vessels to the influence of high heat for several minutes, at least, and steam is by far the best agent that can be used. Vessels are often used that are in an improper condition for handling milk; a rusty milk can often spoils more milk than sufficient to buy a new can. Wooden pails ought not to be tolerated. Vessels should be of pressed tin, the joints well flushed with solder, so as to be easily cleaned.

An interesting experiment was made with two cans in summer; one was thoroughly well cleaned in the ordinary way, the other was sterilized by steam for thirty minutes; in the first, the milk was sour in twenty-four hours, in the second in twenty-eight and a half hours; and the first can was found, on examination, to contain twenty-six times as many bacteria as the second. The same experiment repeated in winter showed that the sterilized can kept the milk sweet for nine hours longer than did the other. Milk that has been deprived of most of its germs by Pasteurization will remain sweet in cans thoroughly sterilized by steam for about twice as long as if put into cans cleaned in the ordinary way. Where milk is sent to a factory, it sometimes happens that the milk cans are returned to the farm containing separated milk, whey, or butter-milk. It need hardly be said that this practice is utterly disastrous as well to the factory as to the farmer.

The importance of rejecting the first drops from the udder, called the "fore-milk," is not always recognized. In a sample of the fore-milk that was examined, it was found to contain eight times as many bacteria as the following milk. The actual loss occasioned by rejecting the fore-milk is slight, because the first pint of milk contains a very low percentage of butter fat. The coat of the cow offers exceptional facilities for the harboring of dust and dirt; it is, therefore, extremely rich in various forms of bacterial life that stick to the flanks and underparts of the animals when they lie down. What is true of the animal is likewise true concerning the person of the milker. Clothed in dust-laden garments that he has in daily use, he himself is covered with innumerable bacteria in a dried condition. A large amount of this filth can be restrained or excised off. Bacteria can be dislodged from the skin with ease, while from a moistened surface, however rich in germs, there is little chance of their diffusion. Therefore, the flanks and under-part of the animal, after carding and cleaning, should be thoroughly moistened with water and then dry-sponged, taking care there shall be no drip, so the myriads of germs that remain may be effectually kept out of the milk.

Turkey Gospel.

The first clutch of eggs laid by a turkey are seldom fertile, and if by chance a few are they invariably hatch out weakly poults and crippled ones, no matter whether the eggs were placed under a hen or in an incubator, says Poultry Journal. The second clutch laid do quite often hatch very well, but the poults are not so strong as the ones hatched from eggs laid by a two-year-old hen. If the young turkey hens can have their entire liberty and can forage at will there will be quite a difference in the vitality of the poults. Of a naturally roaming disposition they are better contented, do better in every way, are not so liable to disease and the results are in every way more satisfactory if you allow them to follow this instinct of roving at will in search of a living. If the hen should select a nest in some out of the-way place, don't meddle, just let her alone, and do not allow yourself to be unnecessarily nervous. Turkeys can stand a great deal of "letting alone," and they hatch mo-poults and stronger ones by such treatment. I shouldn't advise anyone to move a brood turkey unless it was an old one and accustomed to being handled by its owner. The second cause is lice; they will kill more poults and do it quicker than any other one thing.

Fig Fertilization.

The Department of Agriculture has made a preliminary attempt to introduce from southern Europe into California an insect which is responsible for the fertilization of the Smyrna figs of commerce. The entomologist visited California in the spring of 1898 and found that conditions were ripe for such an attempted introduction, and an agent in Europe will, during the coming year, endeavor to take the necessary steps to bring about this introduction, which, it is hoped, will result in the production by California of a fig equal to the Smyrna fig.

Corn Cribs Lay no Eggs.

A farmer made the remark to me a short time ago, that he did not like the Buff Cochin as a farm fowl on account of their laziness, and being so easily caught by hawks and coyotes (wolves). His neighbor's reason for disliking them was something like this: "His wife's half sister's husband's brother's wife once had them, and they never laid an egg, although she had them six or seven years, and fed them all the corn they could eat all the time." She certainly tried to make corn cribs of her Buff Cochins. A corn crib won't lay many eggs.—Ex.

Some idea of the rise in the values of horses may be gauged by a report sent out from East Buffalo which is to the effect that the light legged kinds, 15.2 to 15.3 hands, 1,025 lb., to 1,100 lb., fairly good looked and with some style and a good road gait, which now sell for around $300 a pair, could have been bought three years ago for from $100 to $150 a pair. Indeed, the horses that could be bought in the dullest of the dull times for from $100 to $150 a pair were on the average slightly superior to those for which $300 per pair is readily paid.

You can't mend your manners with a needle.

THANKFUL TO MRS. PINKHAM.

Earnest Words From Women Who Have Been Relieved of Backache —Mrs. Pinkham Warns Against Neglect.

DEAR MRS. PINKHAM:—I have been thankful a thousand times, since I wrote you, for what your Vegetable Compound has done for me. I followed your advice carefully, and now I feel like a different person. My troubles were backache, headache, nervous tired feeling, painful menstruation and leucorrhœa.

I took four bottles of Vegetable Compound, one box of Liver Pills, and used one package of Sanative Wash, and am now well. I thank you again for the good you have done for me.—EMMA E. BRENNER, East Rochester, Ohio.

Great numbers of such letters as the above are constantly being received by Mrs. Pinkham from women who owe their health and happiness to her advice and medicine.

Mrs. Pinkham's address is Lynn, Mass. Her advice is offered free to all suffering women who are puzzled about themselves.

If you have backache don't neglect it or try heroically to "work it down," you must reach the root of the trouble, and nothing will do this so safely and surely as Lydia E. Pinkham's Vegetable Compound. Backache is accompanied by a lot of other aches and wearying sensations, but they nearly always come from the same source. Remove the cause of these distressing things, and you become well and strong. Mrs. S. J. SWANSON, of Gibson City, Ill., tells her experience in the following letter:

"DEAR MRS. PINKHAM:—Before using your medicine I was troubled with headache and my back ached so that I could not rest. Your medicine is the best I have ever used; it has relieved me of my troubles, and I feel like myself again. Thanks to Lydia E. Pinkham.

"I would advise any one troubled with female weakness to take your medicine. I shall also recommend it wherever I can as a great reliever of pain."

A Million Women Have Been Benefited by Mrs. Pinkham's Advice and Medicine

HOME-MADE PHILOSOPHY.

A country that can't be saved without the cord, iz like the pig that can't be cured without bein butchered.

The man hoo trooly loves his nabor will not skin him in a hoss trade, nor dump his tater bugs over inter his patch wen God iz lookin.

Sum ov the happiest people are not known outside the town they wuz born in; un sum ov the most milzerbull are known all over the globe.

Never thottessly say a word that will draw the blud into yoore naborze face, nor one that will force it back upon his heart. The circulatin medium is sacred.

Meazure yoor plans with the string that girdles your purse; and meazyure yoor religyun by the length ov yoor arm wen you are reachin out to help a fallen brother.

The man hoo remains kwiet wen Wrong asts hiz opinyun, iz either a cowyard, a fool, or a theefe. But how often do them az do answer, flatter Wrong, and tell him heeze a saint!

In a world ware every poor man has not got a home for his little loved ones, iz a hard place to make the poor man beeleeve that God iz love and Justice, and we are awl his little children.

Substrackshun and addishun is awl the grithmetick a bee kin learn. She duzzent believe in keepin too many irons in the fire too wunst; but the one she allers keps in is good and hot anuff to warm a boy clean throo his summer pants.

Man iz a creeter ov habits and immertashun. His immertashuns drift inter a habit, and the innercent boy hoo trize so hard to immertate men, soon finds it impossibull to immertate the innercent little boy agin. Innercense iz hard to immertate.

Sum proverbs are maid to defend the rich, sum to defend the poor, and sum for the benefit ov fools; but a proverb that duz not tell the trooth, the hole trooth, and nuthin but the trooth, but still pretends to be the trooth, iz the sort that pollytishuns pay for.

OPALS.

The superstition about the opal being an unlucky gem has about worn itself away. It is a beautiful stone and is becoming very popular. Russell Sage has worn an opal for years. He once said he wore the stone because it was the black sheep of the jewel family, and he had always found what was bad for the mob was good for the chosen few.

Chauncey Depew always wears an opal, thinking it a sort of lucky stone. He also admires the gem for its own sake.

Few stage people can be induced to wear an opal or anything else that is considered unlucky. However, there are some exceptions. Lillian Russell is fond of opals, and Della Fox likes them so well she buys them by the dozen. Isadore Rush is another actress who is not afraid to wear this gem.

During the past two years more opals have been sold and worn than for the previous twenty-five years. Most of the stones now come from Australia, because the beautiful Hungarian variety is apt to crack. It improves opals to be put in an occasional alcohol bath. In spite of their beauty, opals are not ranked among the costly gems, for while occasionally as much as $100 a carat has been paid for them, the price is usually much less.

SHOPPING CHAT.

Doesn't the arm get tired holding up skirts? If there is anything useful and ornamental for this purpose why don't women adopt it

Those French flannels are sweet enough in shade to eat, and are just the thing for a woolen shirtwaist. Did you notice that windowful?

Doesn't black velvet, trimmed with black marten, make a handsome coat? Did you see that one on a gray-haired matron? It set off everything else she had on.

Notwithstanding all the edicts to the contrary, or as to its being no longer smart, the shimmery rustle that betokens silken lining always attracts attention from other women, and they all have it who can.

Observation shows that the soft crush belt of black satin on a leather foundation is still a favorite. All sorts and conditions of clasps are worn. Those set with turquoise, enamel, imitation amethysts or emeralds are very "dudish."

Two New Zealanders have invented a buckle which will be found useful where there is no means of sewing the strap in place, a T being formed on the end to be permanently affixed, to be inserted in a slot cut in the end of the strap at right angles with the head.

A

WINTER EXCURSION.

If stich you can find in yoor purse with enuffmakin fare to allow uneself a special excursion to certain daze this winter at

HOT SPRINGS, SOUTH DAKOTA.

The expense is less than it duz to the Northwestern fare, and you will get all other benefits of our line besides a good service with low rates during the winter.

Round Trip Rates	Omaha,	$16 40
	Mo. Valley	15 35
	Sioux City,	14 80

and corresponding reductions from other points west.

Climate, Water, Scenery and Hotels are unexcelled. Thirty days time allowed and stopovers at Chicago, Council Bluffs, Omaha, Ft. Dodge, Waterloo and Sioux City. Ask C. A. Wheeler, Gen'l Passenger Agent, Dunlap, Iowa, can tell you more about it.

The next date will be

FEBRUARY 14.

1,000 NEWSPAPERS

Are now using our

International Type-High Plates

Sawed to

LABOR-SAVING LENGTHS.

They will save time in your composing room as they can be handled even quicker than type.

No extra charge is made for sawing plates to short lengths.

Send a trial order to this office and be convinced.

WESTERN NEWSPAPER UNION,
DETROIT, MICH.

TOURIST SLEEPERS TO

CALIFORNIA

VIA

WABASH

You will practice good economy in writing

C. S. CRANE, C.P. & T. A., St. Louis, for particulars.

"America's most popular railroad."

Chicago & Alton R.R.

PERFECT PASSENGER SERVICE BETWEEN

CHICAGO and KANSAS CITY,
CHICAGO and ST. LOUIS,
CHICAGO and PEORIA,
ST. LOUIS and KANSAS CITY.

Through Pullman service between Chicago and

HOT SPRINGS, Ark., DENVER, Colo., CALIFORNIA and OREGON.

If you are contemplating a trip, any portion of which can be made over the Chicago & Alton, it will pay you to write to the undersigned for maps, pamphlets, rates, time tables, etc.

JAMES CHARLTON,
General Passenger and Ticket Agent,
CHICAGO, ILLINOIS.

CALIFORNIA

ROCK ISLAND

PERSONALLY CONDUCTED

TOURIST EXCURSIONS

Leave Chicago every Thursday via Colorado Springs and Scenic Route to San Francisco and Los Angeles.

Southern Route leaves Chicago every Tuesday via Kansas City, Ft. Worth and El Paso to Los Angeles.

Accompany these Excursions and SAVE MONEY. All the lowest rate tickets are available in these

Through Pullman Tourist Cars

Write for itinerary which gives full information and new map, sent free. Address

JOHN. SEBASTIAN, G. P. A., Chicago.

When Answering Advertisements Kindly Mention This Paper.