

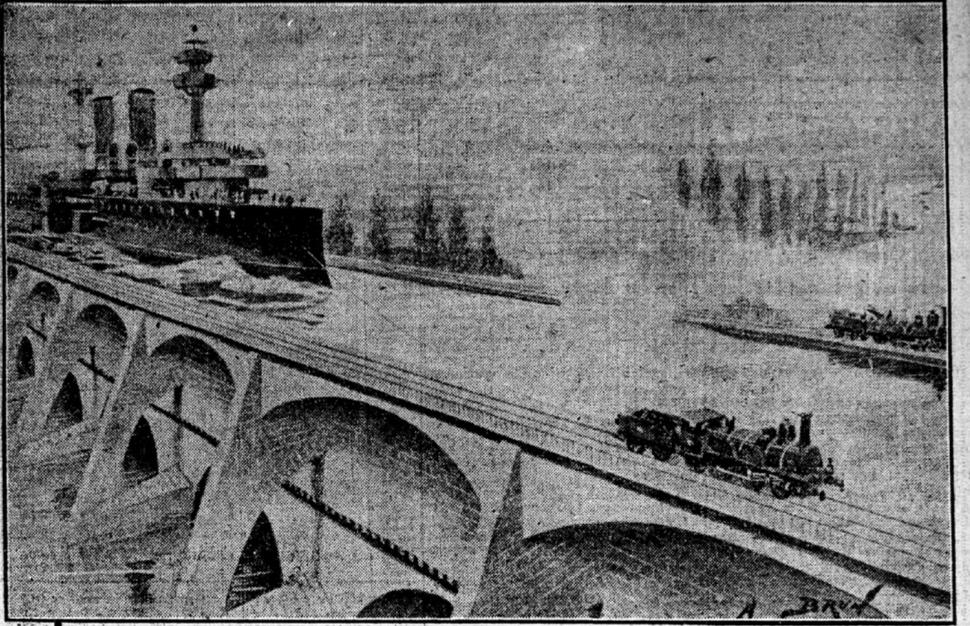
MINNEAPOLIS, MINNESOTA, SUNDAY MORNING, FEBRUARY 12, 1906.

TO NULLIFY GIBRALTAR, THE AMBITIOUS PLAN OF FRANCE

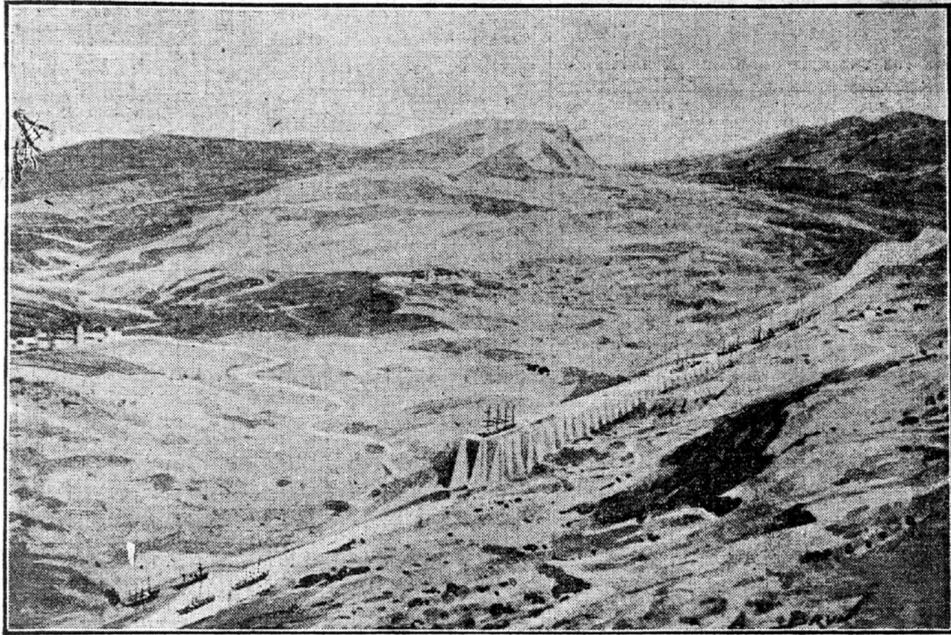
A Gigantic Canal, with a Marvelous System of Locks and Elevators for Great Ships, May Cross the Country from the Atlantic to the Mediterranean.

The remarkable project France is now working on, which is described by The Journal's Paris correspondent, is attracting the attention of engineers throughout the world. It is a stupendous undertaking—perhaps the most stupendous in the world. Such a canal as is proposed would require eight years to build. But at the end of that time the Mediterranean sea would no longer be "an English lake"; England's world-famous Gibraltar—that synonym of strength and power whose secrets are so carefully guarded—would be ineffectual. For France could then take her warships and her merchant vessels

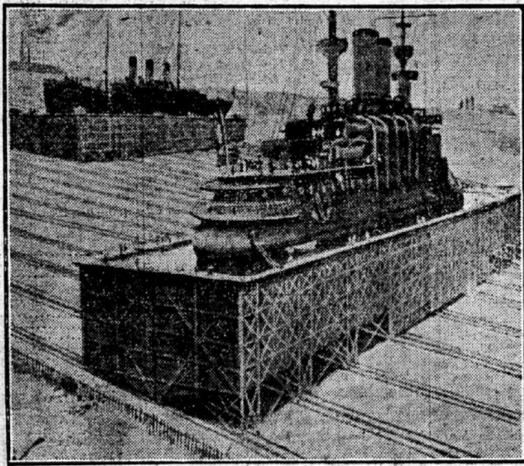
across her own country thru the wonderful waterway at the base of the Pyrenees, and into the Mediterranean, out of the reach of the great guns that project from the frowning rock at the natural entrance of the sea from the Atlantic. France would be extensively changed by the new canal. Her coast line would be more than doubled and inland cities would become ocean ports. In case of war, France would have a way into the Mediterranean which no country could blockade without occupying lower France itself. It may mean a Latin union of great power.



THE CANAL-AQUEDUCT TO CROSS THE GARRONE RIVER.



THE NAUROUZE PASS—HERE THE MOST CUTTING MUST BE DONE.



THE SHIP ELEVATOR—VESSELS ASCENDING AND DESCENDING IN COUNTERPOISED DRYDOCKS.

chion to Agen, on the Garonne, eighty-six miles of easy cutting, without a single lock. The waters of the Garonne are themselves to be reinforced from the torrents of the Pyrenees—which will save Toulouse and many another town from the periodic inundations that now trouble them.

Inland City Will Be Maritime.

Between Agen and Toulouse the Garonne, strongly banked and become at last the safe drain of these mountain torrents, will take the fleets of war and commerce to Toulouse—become the central maritime arsenal of France.

There is something really astounding in the idea. Toulouse, that most inland city of the south of France, will become an extraordinary center. From every point French railways will bring troops, marines, provisions and munitions for swift distribution. Around Toulouse will be grouped cannon foundries, ammunition factories. In the docks of Toulouse a fleet can wait, to be thrown on the Atlantic or the Mediterranean coast as may be.

From Toulouse to Castelnau the route is along the bed of the old canal of Languedoc of Clara Ward's ancestor-by-marriage. The old canal abounds in locks. To lift it 200 feet in one particular stretch there are seventeen of them. The descent of the Aude, 300 feet, requires more than fifty locks.

By an audacious compromise between cuttings and locks of unprecedented bigness and novelty, sixteen locks will do the whole job of the watershed that has its apex in the dreaded Naurouze pass, and they are to be the revenge of French engineering science on the lamentable failure of Panama. French hearts are cheered up at the thought. Work in abundance will be furnished to French laborers for years to come, and not a dollar of the money will leave France.

From the start it was perceived that ordinary locks would not serve. With them the passage from the Atlantic to the Mediterranean would consume six days. Furthermore, the altitude of the canal is the great detail on which the commission of the minister of public works will have to report. One way to diminish the number of locks—it is estimated that 200 old-fashioned ones would be required—would be to keep the canal to the low altitudes as much as possible, and when arriving at the Naurouze pass to vanquish it by a Titanic cut.

An Elevator for Ships.

This cut, if decided on, will have to be 600 feet deep. On the other hand, a compromise to make a lesser cutting may be arrived at by means of two ingenious novelties—a ship elevator and a rolling lock.

The ship elevator is a device by which two counterpoised drydocks lift a ship that wants to rise by aid of one

desiring to descend. Hydraulic pressure does the rest. Needless to be said, it has never yet been tried. Nor has, indeed, the rolling lock. This latter is a simple lock basin that rolls up and down an inclined plane on many tracks. Here too, the weight of a descending mass would help to lift a rising mass.

What is known to be practicable, in any case, is the perfected giant lock—not differing in appearance from the usual lock except in their possession of metallic basins for the sake of expedition. They will always be twins. One must balance the other. Then, instead of wasting an unprecedented mass of water every time a ship goes thru, only enough will be let in to float the ship in each case. One ship in the bottom basin ready to rise, one ship in the top basin ready to descend. Then, at the proper moment they will let more water into the top basin until it grows heavier and heavier, and sinks and raises at the same time its twin basin just beside it. They will be such locks as the world has never seen. Once thru them it will be plain towing thru the Aude section of the canal to Narbonne on the Mediterranean.

Towed by a Locomotive.

I have said plain towing; but even here the canal of the Two Seas excels in novelty and bigness. The towing will be done by nothing less than powerful locomotive engines running on railway tracks parallel to the canal on either side. And is it not a grandiose picture, worthy of the dawning century, to see a French battleship, towed by its locomotives thru the waters of the massive aqueduct that is to span the Garonne river at one point?

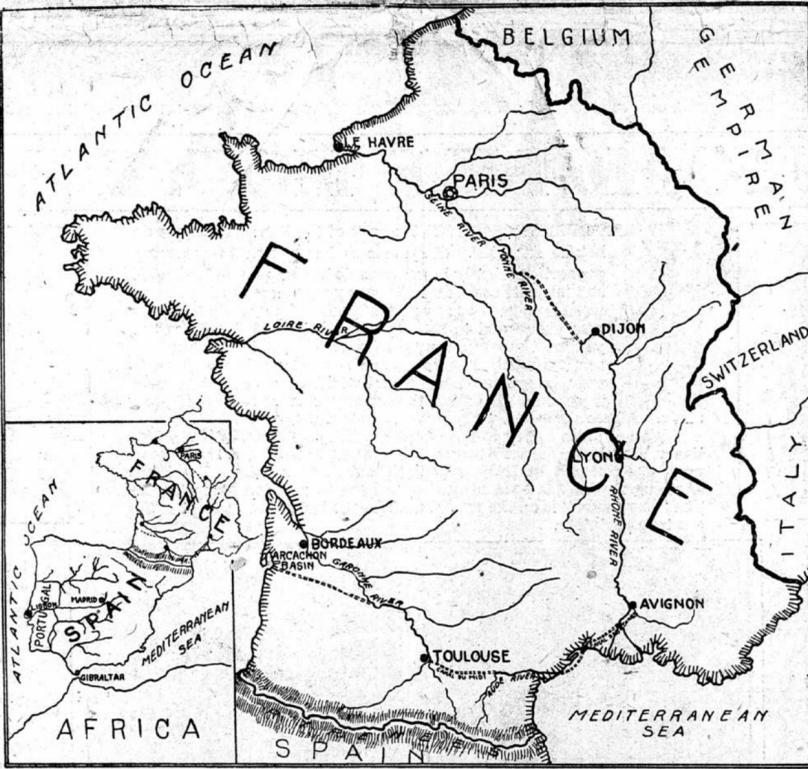
Of course the great thing is to get this canal built without delay. The French deep-sea carrying is less than that of Italy or Norway. German boats touch at Cherbourg to calmly take American freight away from the French companies, and English boats for the east make Marseille their terminus. Over 90 per cent of French exports are carried in foreign bottoms, giving over \$50,000,000 annually to the English, Germans and Italians.

While the French coasting trade is reduced to less than 3,000,000 tons a year, that of Great Britain is over 120,000,000 tons. Germany has united her manufacturing towns to Genoa and Brindisi by the St. Gothard, and when the Bernese Oberland is tunneled the Simplon will still more favor Germany. Antwerp is united to Salonica by Mayence and Vienna.

In Case of War.

In case of war it is promised that the new canal will be able to transport the French fleet from the Atlantic to the Mediterranean in two days. It will give passage to her allies' fleets at pleasure, and the European combination that shall possess this extraordinary deep-sea short cut will become the mistress of the Mediterranean, ignoring Gibraltar. Who are these possible allies, encouraged by the new promise of power? They are Spain and Italy, and the Latin union will become one of the first fruits of the canal of the Two Seas.

It is estimated that for perfumery purposes each year 1,800 tons of orange flowers, 930 tons of roses, 150 tons each of violets and geraniums, seventy-five tons of tuberoses, thirty tons of cassia and fifteen tons of jonquils are used.



MAP INDICATING PROPOSED ROUTE OF CANAL. The first section to extend from the natural basin of Arcaehon to the Garonne river. That stream to be made navigable to Toulouse. Thence along the bed of the old canal of Languedoc, with seventeen locks. The descent of the Aude, 300 feet, requires more than fifty locks. By rivers and canals, ships could go, also, from the Mediterranean to Paris and on to the Atlantic.

By Sterling Hellig.

PARIS, Feb. 2.—By a gigantic engineering work entirely within their own borders, the French are preparing to lift their shipping to the first rank, double the force of their navy and cause the Mediterranean to cease to be "an English lake"—by nullifying Gibraltar.

They propose to copy England by transforming part of France (with Spain) into an island, more than doubling their seacoast and creating ocean ports for inland cities. This is to be accomplished by constructing a vast ship canal across the lower end of France from the Atlantic to the Mediterranean. By its means the French fleet can operate one day on the Atlantic, and two days later show itself in Mediterranean ports without subjecting itself to the guns of Gibraltar and small coasters.

The route exists already for canal-boats, and to enlarge it for warships and merchantmen is no mere dream. Since 1878 "the Canal of the Two Seas" has been planned over by engineers. Three parliamentary commissions have made estimates upon it. And now M. Gauthier, minister of public works, has sent his own commission to make final studies of the scheme, and its conclusions are to be submitted to the lower house for action.

aman in 1666 in order to reward him for assisting this canal of Languedoc, the first great artificial waterway of Europe.

The system was completed for small crafts by digging lateral canals beside the rivers and fed by their waters. Today small coasters and canalboats creep up the Garonne from Bordeaux, enter the Garonne lateral at Castets, climb up the watershed to the Naurouze pass by way of Riquet's locks, descend the Mediterranean watershed to the Aude river and Aude lateral, and strike the Mediterranean either at Narbonne or further up, at Cotte; and, so has the great system been completed, they can skirt the Mediterranean coast and climb up to the Rhone at Avignon and thence on up to Lyons—and even beyond, to Dijon, strike the Marne canal and so gain Paris, in the north. It is but a small part of a gigantic network of canal routes.

Will Cost \$160,000,000.

The modern engineers have a gigantic task before them simply to enlarge the Bordeaux-Narbonne system to a deep-sea ship canal. Eight years will be required. The cost is estimated at a minimum of \$160,000,000, although one of the earlier commissions set it at \$200,000,000 and another, \$400,000,000 not too much!

The present estimates demand 30,000 workmen guided by thirty chief engineers and 200 overseers, with digging and tunneling machines driven by some 60,000 horsepower.

One of the chief surprises is the abandonment of Bordeaux. As the canal is to be a great patriotic work as well as a commercial revolutionizer, doubling the force of the French fleet by permitting it to shift by magic from the Atlantic to the Mediterranean, the first thought has to be the security of warships in its Atlantic entrance. They have, therefore, chosen the extraordinary natural basin of Arcaehon, which is in reality much nearer to Bordeaux than the mouth of the Garonne; and the canal will strike that river just beyond Bordeaux.

The route is straight from Arca-

Over a High Watershed.

As early as the year 1530, King Francis I was studying how to join the Garonne river, which empties into the Atlantic, to the Aude, which empties into the Mediterranean. A canal would have to be built to climb the watershed on one side and descend it on the other. One insuperable difficulty stared those ancient workers in the face—the Naurouze pass—which threatens, even today, to be for the canal what the Culebra is for Panama. The Duc de Joyeuse, in the time of Charles IX and Henry IV in the year 1599, surveyed the job and gave it up; but less than 100 years later an engineer of genius did it.

It was Pierre Paul Riquet, whom King Louis XIV created Count of Car-

DEATH AVOIDS A FAMILY 50 YEARS

Seven Brothers and Sisters Celebrate the Event by Thanksgiving Feast.

Washington, Feb. 17.—Not often does it happen that a family of brothers and sisters, seven in all—four brothers and three sisters—can meet in reunion and offer up thanks that for more than half a century death has made no invasion in their ranks.

Such, however, has been the blessing bestowed upon the Simpson family, who, at a recent gathering in this city, at the residence of Mrs. McKim, widow of the well-known Dr. Samuel McKim, and one of the girls of the family, were all together at once, like unto the days when they were children. They are all of English birth, and, with their parents, Thomas and Mary Simpson, came to this country more than half a century ago. The elders died

after becoming established in their new home, but the children, the oldest of whom is 85, and the baby of the family just twenty years younger, have thrived and prospered, and contentment holds sway at their respective residences.

Four of this particular Simpson group live in this city, or in the immediate locality, and the remaining three in Jersey City, N. J. At their recent reunion there was none present save the brothers and sisters, and a happier little group of brothers and sisters could hardly have been brought together under one roof. They talked of old times and old friends, presented souvenirs to each other, and recalled no end of recollections of days that have long passed away.

To crown it all, these pilgrims from the mother country went for a ride together and had their pictures taken. They are all in good health, and, judging from personal appearances, there is no reason to doubt that before a decade or two passes they may once more have the happiness of getting together in another reunion and extend one to another their mutual congratulations.

"I always thought," remarked an English judge, "that a parasol and a sunshade were the same." "No," replied the witness on the stand; "a sunshade is to keep the sun off; a parasol is to flirt with."

FEATHER DUSTERS SPREAD PNEUMONIA

Dry Sweeping Causes Increase of Consumption, Says Professor T. M. Prudden.

New York, Feb. 17.—Consumption, pneumonia, bronchitis, cerebro spinal meningitis and all other infectious diseases of the respiratory organs might almost disappear from New York, according to Professor T. Mitchell Prudden of Columbia university, if people would only throw away their feather dusters and wet their brooms every time they sweep.

In an address before the Practitioners' society of this city, just now made public, Professor Prudden, who is a distinguished bacteriologist and member of the Pneumonia commission, says that dust is the greatest, most constant and most persistent cause of the prevalence of and increase in disease here,

AIR CURRENTS CARRY GERMS

Health Board Fails to Act.

"The department of health," says Professor Prudden, "has long been aware of this nuisance and danger. It has the power to stop it, but does not do so."

"If in New York the beneficent law against the smoke pollution of the air were enforced; if the streets were properly cleaned; if the great passenger transport systems were placed under competent sanitary supervision; if the health department were persistently alert in enforcing the ordinance of the sanitary code against spitting in public places, and if we could get sweeping and dusting indoors intelligently done, we should have in this city, in my opinion, a fair outlook toward a great advance in the reduction of the diseases of the respiratory organs.

"These diseases are steadily increasing as people are more and more huddled together in offices, dwellings,

AFTER 36 YEARS HE FINDS BALL IN FOOT

French Bullet Makes Its Presence Felt at Last and Is Removed.

Baltimore, Feb. 17.—All unconscious of the fact, Max Bolckhard of 206 Foster avenue spent thirty-six years with an immense rifle bullet lodged between two toes of his left foot. It has just been removed by Dr. John D. Blake and his son, Dr. Herbert C. Blake, with Mr. Bolckhard's little toe and a part of his foot, which had decayed, as the result of the presence of the bullet.

Mr. Bolckhard was a German soldier in the Franco-Prussian war. After passing thru many hard-fought battles without getting a scratch, he received the bullet wound in the foot one winter night while on sentry duty a mile from the troops of the army with which he served. This was on Dec. 2, 1870. He spent the night in the snow in the

FRANCIS BOLCKHARD'S FOOT

French province of Orleans, and the patrol the following morning carried him off to the field hospital, where he received attention. He was later sent to a regular hospital.

The wound healed and Mr. Bolckhard thought nothing more of it, believing that the bullet had been removed. He suffered with rheumatism, and he attributed all his pains, including the one in his foot, which was sometimes intense, to this malady. Recently there were indications that other trouble had developed, and so Dr. Blake, who was summoned, decided that an operation was necessary, as part of the bone had decayed. In removing the diseased bone he discovered the bullet, which was lodged between the little toe and the one adjoining. The bullet is three-quarters of an inch long, and so heavy that Mr. Bolckhard is unable to understand how he carried it about without knowing of its presence. The bullet is preserved as a memento of the war.

Russian Asiatic possessions are three times the size of Great Britain's, but hold only 23,000,000 inhabitants, as compared with England's 297,000,000 subjects.

Eugene Vallat, a well-known United States engineer, with a long and favorable military record, died recently at Detroit. In 1864 he was appointed chief engineer by President Abraham Lincoln.