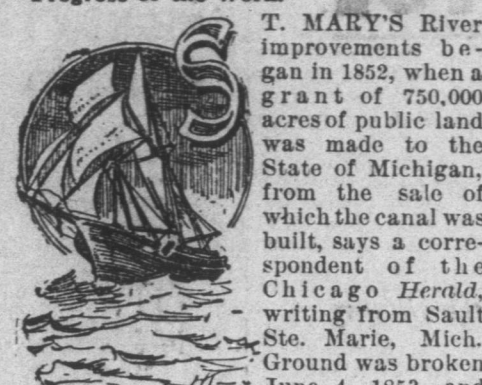


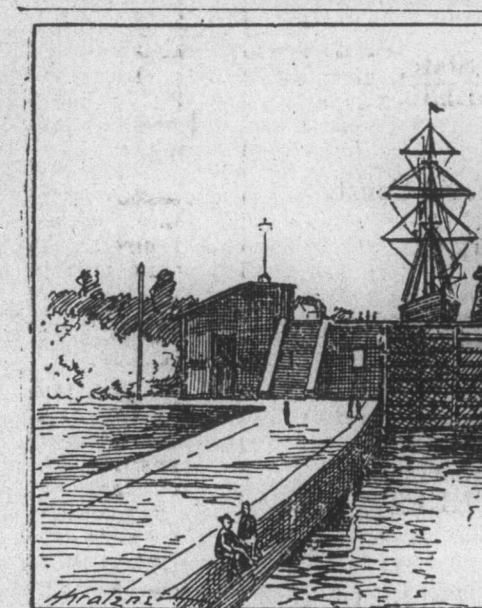
LINKED BY THE LOCKS.

WHERE THE GREAT NORTHERN LAKES MEET.

The Great Canal at Saint Mary's River a Marvel of Engineering Skill, but a Still Greater One in Process of Construction—Progress of the Work.



T. MARY'S River improvements began in 1852, when a grant of 750,000 acres of public land was made to the State of Michigan, from the sale of which the canal was built, says a correspondent of the Chicago Herald, writing from Sault Ste. Marie, Mich. Ground was broken June 4, 1853, and exactly two years and fourteen days from that date the steamer Illinois had the honor of being the first boat to be locked through. This lock had two chambers, each 70 feet wide and 350 feet long, between gates, passing vessels drawing a maximum of eleven and one-half feet.



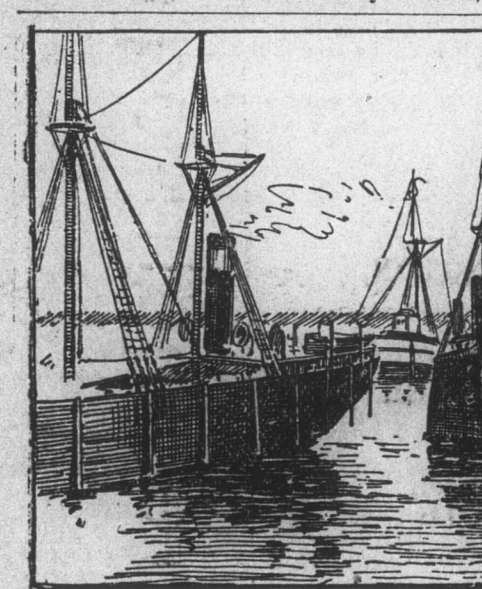
THE LOCKS AT SAULT STE. MARIE.

minutes to empty each lock chamber. For thirty-one years these locks were in commission, and then they were abandoned. To-day there is a vast hole in the ground partially filled with steam drills, huge derricks and tawny Italian laborers that occupy the sites of the old locks, which in turn forms part of the chamber of the new lock now in course of construction.

This masterpiece of engineering skill will be 800 feet long between the gates, 100 feet wide, and 43½ feet deep. Its capacity will be 3,440,000 cubic feet. The depth of water on the miter sills will be 20 feet, and the lift of the lock 18 feet. The volume of water in the lock, when filled to the level of the canal, will be 23,338,000 gallons, over six times the capacity of the first one built. It is expected that four vessels, each 350 feet long and 46 feet wide, can pass through at one lockage. Work was begun in the spring of 1887. It is under the supervision of General Orlando M. Poe, U. S. A., the engineer in charge of the canal improvements, and the estimated cost of the lock, together with the enlarged canal, which is to have a navigable depth of 20 feet, is in the neighborhood of \$5,000,000.

The contractors should have finished their work of excavating last June, but leakages and other drawbacks delayed them, so General Poe granted a six months' extension. He might as well have given them a year, for it is safe to say the big lock will not be ready for the masonry until after navigation opens next spring. Still, the contractors are crowding the work as rapidly as possible, and have lately put on a night force.

The present lock through which all vessels must pass en route to and from Lake Superior has long been considered one of the most remarkable structures in the world of its kind. When, in 1855, the St. Mary's Falls Canal was constructed for the purpose of enabling the traffic by water between Lakes Superior and Huron to overcome a fall of twenty feet four inches in the St. Mary's Strait,



AWAITING THEIR TURN AT THE LOCKS.

which is the connecting waterway between these two important lakes, it was expected that the difficulty was solved for years to come. But scarcely a decade passed before the volume of business had increased so largely that it was easy to figure the first lock would, before long, prove wholly inadequate.

From the shores of Lake Superior came a wealth of iron and copper ore, together with millions of feet of lumber, and to carry this through the canal taxed the lock beyond its capacity. A new and larger one became an absolute necessity, and to supply this demand the United States Government in 1870 let the first contract for the improvement of the canal, which resulted in its enlargement and the building of the magnificent lock in commission to-day.

The canal, originally 5,400 feet long, was increased to 7,000 feet and the depth from twelve feet to sixteen feet. Its width is variable—the least width being 108 feet at the movable dam. Vessels are protected against injury from the

rocky sides of the canal by a revetment of pier work, the general height of which is four feet above mean water level. The material is pine timber one foot square.

The chamber of the lock is 515 feet long between the gates, eighty feet wide, narrowed to sixty feet at the gates. The depth of the water on the miter sills is seventeen feet. The volume of water in the lock chamber when filled to the level of the canal above amounts to 9,888,000 gallons, nearly three times more than that in the old lock, but less than one-half the volume that will be contained in the one now under construction.

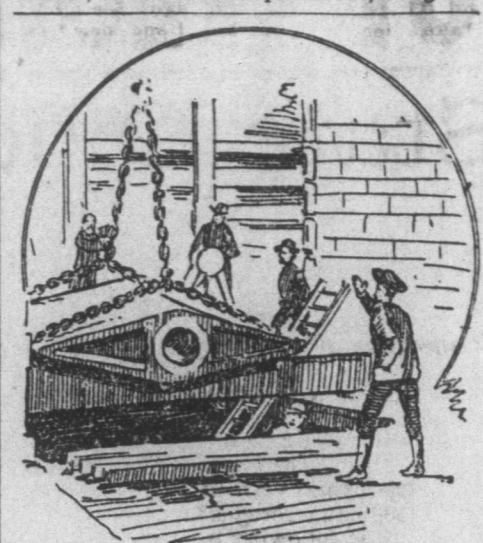
The walls are of limestone. The cut stone was obtained from Marblehead, Ohio, and Kelley's Island, Lake Erie. There are 34,207 cubic yards of masonry in the construction, of which 35,000 barrels of cement were used, every barrel of which was tested before it went to the wall. The foundation is on rock throughout, a Potsdam sandstone of different degrees of hardness. A floor of timber and concrete extends across the bottom of the lock and five feet under each wall. The miter-sills are oak timbers 12 by 18 inches, and fastened in place by bolts ten feet long, fox-edged and concreted in the rock.

The estimated capacity of the lock is ninety-six vessels in twenty-four hours. The limit was nearly reached two years ago, when eighty-four vessels were locked through in one day.

A prettier piece of masonry does not exist anywhere in the United States. The total cost of the canal enlargement was almost \$2,250,000.

Two minutes is required to open or close the lock gates, eleven minutes to fill the lock and eight minutes to empty it. The water reaches the lock from two culverts under the floor. These culverts

the actual freight carried amounting to 7,516,022 tons in addition to nearly twenty-six thousand passengers. The steady increase in business and tedious delays that oftentimes arise have convinced the Government that a single lock cannot accommodate the commerce of the Northern lakes, so on recommendation of Gen. Witzel, of the War Department, Congress



REPAIRING A BROKEN VALVE.

finally authorized the construction of another lock and the improvement of Hay Lake channel. The new lock will be built on very nearly the same lines as the present one, only it will be larger in every way, as already described.

A RIFLE QUEEN.

Miss Adelaide Remsen's Remarkable Record as a Marksman.

Fashionable New York society is happy in the possession of the champion amateur rifle shot in the world. Miss Adelaide Remsen, who, it is claimed, can make a clean score every time. Miss Remsen is an intimate friend of the Marquis de Mores, and was first taught how to handle a rifle by the plucky wife of the nobleman's cowboy. Miss Remsen's favorite weapon is a 38-caliber Winchester rifle. She has an unerring aim and rarely if ever misses her mark. While visiting the Marquis de Mores in the Bad Lands of Dakota, two years ago, the fair New York girl astonished the professional hunters with the remarkable precision of her aim and her wonderful pluck. Miss Remsen has bowled over deer, bear, antelope, and mountain sheep—a truly wonderful record for a man, let alone a pretty young society miss, who performed this marvelous shooting in the face of the greatest dangers.

While at Lennox, Mass., last season and again at Cannes, France, about three months ago, Miss Remsen made such phenomenal scores as to evoke the admiration of the spectators, who presented her with a couple of bejeweled badges emblematic of her prowess with the rifle. The Prince of Wales, who witnessed Miss Remsen's marksmanship at Cannes, presented her with a tiny gold target, studded with priceless



MISS ADELAIDE REMSEN.

gems, which the fair marksman wears as a lace-pin. Miss Remsen is a noted society belle.

How It Is Done.

First City Father—Here's a fine-looking street.

Second ditto—You're right there. What's best to be done to it?

"Let's have it dug up for a sewer."

"But wouldn't it be proper to pave it first?"

"Of course. I supposed you understood that. Then, after it is paved and a sewer put in we'll have it repaved."

"All in readiness to be dug up again for the gas pipe? I see you understand the principles of municipal economy. And after we have it repaved a second time, then what?"

"Well, then, it will be in order for widening. There's nothing I admire so much as system in the care and improvement of our roadways."—Boston Transcript.

As Good as Catarrhs.

Lake Kenka first became noted for the culture of grapes on its shores. The first vineyard was planted about 1850 on the west shore. In 1861 another was planted on Bluff Point. The business proved very profitable, and the cultivation of grapes extended until nearly all available land has been utilized. At present grape land is valued at \$100 to \$300 per acre and bearing vineyards \$500 to \$1,000, the latter price being that of the best Catawba vineyards. The present crop is very promising, and, in view of the general failure of other kinds of fruit, grape-growers are expecting good prices.—Rome Sentinel.

Papa's Wedding Present.

After the wedding: He—What are you crying for, love? She—Over papa's wedding present—boo-hoo.

He—Why, what's the matter with it? She—It's nothing but a receipted bill for the gas we used up during our courtship.—Burlington Free Press.

A Mean Cheat.

Customer (angrily)—This suppressed edition of the "Krentzer Sonata" is a fraud, and I want my money back.

Newsdealer—What's the matter? Customer—There's nothing objectionable about it.—New York Weekly.

ELECTRIC currents of 500 horse-power will be supplied the International Electrical Exhibition at Frankfort from generators 140 miles distant.

She Had a Flesh and Blood Baby.

A lady walking along a street came upon a little girl wheeling a baby carriage. "What a beautiful baby!" exclaimed the lady as she discovered a pink face done up in a cream-colored shawl. "Whose child is it?" "Mine," the girl answered. "Oh, you mean that it is your little brother or sister?" "No, I mean that he is not my brother, but is mine—my child."

"You are a very young mother." "I ain't no mother."

"Then why should you say that the baby is yours?" the lady mischievously asked.

"Cause God sent it to me. My mamma asked me if I didn't want a little baby in the house and I said yes, an' she said if I prayed for one God would send it, and then I said I would pray for a little sister, 'cause I like girls better than boys; but mamma said I jest better pray for any kind that God was a mind to send, but I didn't. I prayed for a little girl, but God took an' sent a boy any way, an' I guess it was 'cause he didn't have any girls on hand. Then I said I would pray to send a little girl as soon as he could, an' it made papa laugh, an' he said I nenter pray any more; he'd send the Lord about it himself. And he did. This is the child—my child."—Pioneer Press.

This Is Meant for You.

It has been truly said that half the world does not know how the other half lives. Comparatively few of us have perfect health, owing to the impure condition of our blood. But we rub along from day to day, with scarcely a thought, unless forced to our attention, of the thousands all about us who are suffering from scrofula, salt rheum, and other serious blood disorders, and whose agonies can only be imagined. The marked success of Hood's Sarsaparilla for these troubles, as shown in our advertising columns frequently, certainly seems to justify urging the use of this excellent medicine by all who know that their blood is disordered. Every claim in behalf of Hood's Sarsaparilla is fully backed up by what the medicine has done and is still doing, and when its proprietors urge its merits and its use upon all who suffer from impure blood, in great or small degrees, they certainly mean to include you.

What a Poor Child Thought.

A young girl, beautiful in form, feature, and dress, sat in a car. Directly opposite sat a poor child of about the same age, shabbily clothed, with a shaming body, slightly deformed as to the shoulders, and an exceedingly plain face, which bore the lines of suffering and want. Her eager eyes were fixed on the face and figure opposite her with a devouring, pathetic look that showed how keenly alive she was to the exceeding beauty of a beautiful body. The object of the gaze began to grow uneasy under its intensity and fixity, and finally, looking the girl coldly in the face, she leaned pertly across the aisle, and said: "Well, Miss Impertinence, if you have looked at me long enough, you will be kind enough to look somewhere else. I'm tired of it."

The poor child grew first red and then white. A look of keen pain came into her eyes, and then tears, as she turned away, and said softly: "I was only thinking how beautiful you are."

Ask Your Friends About It.

Your distressing cough can be cured. We know it, because Kemp's Balsam within the past few years has cured so many coughs and colds in this community. Its remarkable sale has been entirely by its genuine merit. Ask some friend who has used it what he thinks of Kemp's Balsam. There is no medicine so pure, none so effective. Large bottles 50c and \$1 at all druggists. Sample bottle free.

Not So Bad as Alleged.

Considerable complaint is heard because of alleged rough and unkind remarks recently made by a minister of the gospel from the pulpit here in regard to the people of Belleville, among other things that "Belleville would be a more appropriate name for our town than Belleville." The Standard trusts that there is some mistake or even exaggeration about this. The real facts are that we, who have lived and prospered here for twenty years or more, are strongly impressed, in fact, firmly believe, that our little town is a real nice place, and the better class of people are largely in the majority here.—Belleville (Texas) Standard.

A. M. PRIEST, Druggist, Shelbyville, Ind., says: "Hall's Catarrh Cure gave me the most satisfaction. Can get plenty of testimonials, as it cures every one who takes it." Druggists sell it, 75c.

AMONG the incidents of the late Grand Army reunion in Boston was the meeting of two brothers, natives of Maine, who had not seen each other since the war and each of whom supposed the other to have been killed in that conflict. One now lives in New York and the other in Vermont.

MEN think "house-cleaning" easy, but unless a woman uses SAPOLIO the proverb is true, "Easier rule a kingdom than manage a house."

Elys Cream Balm For CATARRH
THE POSITIVE CURE.
ELY BROTHERS, 56 Warren St., New York. Price 50 cts.

Catarrh Cured, ONE CENT!

If you suffer from Catarrh, in any of its forms, it is your duty to yourself and family to obtain the means of a certain cure before it is too late. This you can do at an expense of one cent for a postal card, by sending your name and address to Prof. J. A. Lawrence, New York, who will send you FREE, by return mail, a copy of the original recipe for preparing the best and surest remedy ever discovered for the cure of Catarrh in all its various stages. Over one million cases of this dreadful, disgusting, and often times fatal disease have been cured permanently during the past five years by the use of this medicine. Write to-day for this FREE recipe, its timely use may save you from the death tolls of Consumption. DO NOT DELAY longer, if you desire a speedy and permanent cure. Address: Prof. J. A. LAWRENCE, 1355 West 10th Street, New York.

Before you buy anything ask two questions:
"Do I really want it?" "Can I do without it?"
If you answer "No" to either, don't buy it.
HONESTLY ANSWERED.
these questions may make you rich, but they will never prevent you from buying SAPOLIO.

Its uses are many and so are its friends; for where it is once used it is always used. To clean house without it is sheer folly, since it does the work twice as fast and twice as well.

Long Life to Him!

Long life to the jolly man! Wherever he goes there fits a breeze or sparkles a sunbeam, or, behold! the refreshment of a shower that turns the withered commonplace of life green as an April meadow, writes Amber. I have no patience with that etiquette that forbids hearty laughter. As well reprove a lark for singing when the sun is rising. I have no patience either with the crackle of thorny laughter under the bubbling pot of meaningless mirth; but downright contagious hilarity with its quick peal of laughter bells—give us plenty of that to keep our hearts in tune with melody. Did you ever hear of a villain who was full of the appreciation of humor, or quickly moved to laughter? Bad men may show their teeth, like Carver, or comfort their faces into meaningless smiles, but their merriment is as different from the loud laughter of good men as the call of the night bird differs from a bobolink's sunlit spray of morning melody.

Don't use Electric Soap does not chap the hands, being perfectly pure. Many people afflicted with Salt Rheum have been cured by its use. Preserves and whitens clothes. Have your grocer order it and try it now.

GEORGE BLISS swore so frightfully at Mrs. Charles Graham, near New Albany, Ind., that she went into convulsions and died.

An indignant professor of anatomy in New York denies that there is a skeleton in every closet—he has pawned his. —Texas Siftings.

WHEN medicine is given a child, parents like to feel it is a safe and proper one. Such a remedy is Dr. Bull's Worm Destroyer.

The world's a stage, and you will always have crowded houses when you make a fool of yourself.—Atchison Globe.

For a disordered liver try BEECHAM'S PILLS.

A MAN'S tongue can spoil all his industry.

If afflicted with Sore Eyes, use Dr. Isaac Thompson's Eye Water. Druggists sell it 25c.

THE POINT.

"A" From a Catholic Archbishop down to the poorest of the poor all testify, not only to the virtues of

ST. JACOBS OIL,
The Great Remedy For Pain, but to its superiority over all other remedies, expressed thus:

It Cures Promptly, Permanently; which means strictly, that the pain-stricken seek a prompt relief with no return of the pain. They say, St. Jacobs Oil will give. This is its excellence.



ONE ENJOYS

Both the method and results when Syrup of Figs is taken; it is pleasant and refreshing to the taste, and acts gently yet promptly on the Kidneys, Liver and Bowels, cleanses the system effectually, dispels colds, headaches and fevers and cures habitual constipation. Syrup of Figs is the only remedy of its kind ever produced, pleasing to the taste and acceptable to the stomach, prompt in its action and truly beneficial in its effects, prepared only from the most healthy and agreeable substances, its many excellent qualities commend it to all and have made it the most popular remedy known.

Syrup of Figs is for sale in 50c and \$1 bottles by all leading druggists. Any reliable druggist who may not have it on hand will procure it promptly for any one who wishes to try it. Do not accept any substitute.

CALIFORNIA FIG SYRUP CO.
SAN FRANCISCO, CAL. NEW YORK, N.Y. LOUISVILLE, KY.



"Well! Well!"

That's the way you feel after one or two of Dr. Pierce's Pleasant Pellets have done their work. You feel well, instead of bilious and constipated; your sick headache, dizziness and indigestion are gone. It's done mildly and easily, too. You don't have to feel worse before you feel better. That is the trouble with the huge, old-fashioned pill. These are small, sugar-coated, easiest to take. One little Pellet's a laxative, three to four are cathartic. They regulate and cleanse the liver, stomach and bowels—quickly, but thoroughly. They're the cheapest pill, sold by druggists, because you only pay for the good you get. They're guaranteed to give satisfaction, every time, or your money is returned. That's the peculiar plan all Dr. Pierce's medicines are sold on.

Can you ask more?

AGENTS WANTED to sell the Acme Rug and Tug Machine, \$1.50. Every lady will buy at sight. Our agents are making \$10 to \$15 a day. HARMON & CO., 821 East Broadway, N. Y.

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by mail to sufferers. Dr. H. SCHIFFMAN, St. Paul, Minn.

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Popham's Asthma Specific Gives immediate relief. It is believed to be the best ASTHMA Remedy known to humanity. As evidence we give a Trial Package FREE. Sold by Druggists, sent by mail, postpaid, for \$1 per Box. Address: THOS. POPHAM, 3001 Ridge Avenue, Chicago.

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POWDERED AND PERFUMED. (PATENTED.)

The strongest and purest Lye made. Will dissolve Perfumed HARD SOAP in twenty minutes without boiling. It is the best for cleaning closets, drains, washing bottles, barrels, paints, etc.

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DR. T. FELIX GOURAUD'S ORIENTAL CREAM, OR MAGICAL BEAUTIFIER.
Removes Tan, Freckles, Moth Patches, Black and Skin Diseases, and every blemish on beauty, and delicate detection. It has stood the test of 50 years, and is so harmless we taste it to be sure it is properly made. Accept no counterfeits of similar name. Dr. L. A. Syer said to lady of the London (a patient): "As you ladies will use this cream, I recommend 'Gouraud's Cream'—the best I have felt of all the skin preparations." For sale by all Druggists and Fancy Goods Dealers in the U.S., Canada, and Europe.

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I prescribe and fully endorse Big G as the only specific for the certain cure of this disease. **G. H. INGRAHAM, M. D.,** of Amsterdam, N. Y.

We have sold Big G for many years, and it has given the best of satisfaction. **D. B. DYCHÉ & CO.,** Cin. Ohio.

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