

# The Democratic Sentinel

RENSSELAER, INDIANA.

J. W. McEWEN, PUBLISHER.

A good horse-meat dinner can now be had in Berlin for five cents. Americans will find no fault with the price.

A WELL-KNOWN countess in England recently paid a board bill for herself and twenty-three cats, over forty goats, two dogs and a monkey.

The photographic newspaper is the next thing in journalism. Paris already has one which deals with all sorts of subjects in the most thorough manner. London is likely to have one very soon.

In Austria the hangman is a man named Seigfried, who wears a black uniform, with a cocked hat and white gloves. He has never had to hang a woman, for the Emperor thinks strangu- lation is a punishment which should be reserved for males.

TO HANDICAP the activity of some of the members of the British Parliament who are noted for the presentation of bills for the reformation of everything, it is proposed that hereafter all bills shall be printed, before introduction, at the expense of the members who introduce them.

It is a risky thing to receive into the bosom of the family a long lost son who has no strawberry mark to identify him. A Pennsylvania farmer has been victimized by a clever sharper, who personated the returned prodigal long enough to eat the fatted calf and secure \$5,000 in cash. Then he lost himself again.

THE only female company of regular State militia in the United States is located at Cheyenne, Wyoming. The company was organized to celebrate the date of Wyoming's Statehood, and met with such great approval that it was decided to make the organization permanent, and the young ladies were mustered into the regular service of the State.

A STRANGE case, which has enlisted the attention of medical men, is that of James Melville, of Concord, Mass. For twelve years he has lain upon a bed without changing his position. The bony portions of his body have united into one piece, and from the crown of his head to the soles of his feet there is not a joint responsive to his will.

In the province of Perm, in Russia, there has just passed away a remarkable person, Stefen Aberjew by name, in his one hundred and tenth year. The village priest, who has known the old man for the last thirty years, states that he had never seen him sober since his eightieth birthday. Toward the end of his life he drank over a quart of corn brandy a day. He was never ill in his life.

AMONG the veterans who attended the Grand Army reunion at Boston was John F. Chase of Augusta, Me., who received forty-eight wounds by the explosion of a shell at Gettysburg. His right arm was blown off, and his left eye torn from its socket, and he lay on the field two days before it was discovered that he was alive. He is now in comfortable health, and receives a pension of \$46 a month.

It is said that no worm or insect is ever found upon the eucalyptus tree, or in the earth where the roots penetrate. A row of trees planted through an orchard or vineyard will cause insects, worms, or caterpillars to vacate that region. The branches of the eucalyptus used in the rooms or windows, or as decorations in dwelling-rooms, will cause mosquitoes, moths, fleas, and flies to leave the premises.

JONATHAN HART, of Hillsboro, Ill., put a loaded gun into the hands of his twelve-year-old son and told him to shoot anybody that entered the melon patch and stole melons. Then he disguised himself, entered the patch and began to cut a melon, just to see if the boy would do as told. The boy did, and Jonathan got the contents of both barrels and may die. His idea was that a miserable melon was worth more than a human life, and fate seems to agree with him.

SPEAKING of South Africa, a traveler lately returned from there makes the assertion that it is one of the best countries in the world for profitable real estate investments. It already has beautiful and thriving towns, and it is destined to be the seat of a great and progressive English-speaking race. When he was there some years ago he was surprised at the extensive improvements, at the energy of the people, and the natural resources of the land. It is the place of places to put away a few thousand dollars to let them grow.

In visiting the foreign cathedrals and art galleries one is often struck with the utter disregard of time and truth that the masters displayed. At the Cathedral of Blaubeuren, in Wurtemberg, there is a rich canvas portraying the impending sacrifice of Isaac by his father. The picture, in its tones and tints, is perfect. Isaac seems endowed with life, so natural is the effect; and Abraham, the patriarch, is a masterpiece.

But the father has reached forward in civilization several thousand years, and is about to blow out his boy's brains with a flint-lock pistol. It is easy to imagine the incongruity of the effect.

THE quantity of meat thrown overboard into the Atlantic is very great, says an English paper. Out of 185 car-

goes of animals sent to British ports in one year from Canada, consisting of 61,092 head of cattle, 61,382 sheep and seventy-five pigs, 658 cattle, 1,170 sheep and one pig were consigned to the deep during the voyage. Of the 342 cargoes imported from the United States to this country, comprising 138,661 head of cattle, 30,317 sheep and seventeen pigs, 1,570 of the first and 857 of the second class of this live stock were thrown overboard during the voyage, thus numbering 4,856 animals which were pitched into the sea for the year.

In the rear room of one of the most celebrated burial shops in New York there has met for years one of the jolliest social organizations in that city. It is known as the Midnight Club, and is composed of preachers, undertakers, men about town, embalmers, and men of business, with a newspaper man for president. There are caskets and coffins of every size in the huge cases that line the walls, and usually several corpses are awaiting shipment or burial, but the surroundings have no stifling effects upon the spirits of the midnight gathering, and if anything they add zest to the jokes that bubble up to the surface in the intervals of more solid conversation.

PERHAPS the most valuablefad patronized by London society is the system of ragged schools which has for its aim and object the education of the poor and neglected little boys and girls of the East End. Under the promise of shoes, jackets, dresses, hats and wraps the half-savage and more than half-starved children are allure to these schools, taught a number of useful things and trained in the use of books, clothes, money, soap and water. Four thousand teachers are regularly employed, most of whom give their services gratuitously. Special features of the system are the penny savings banks, which have a fund of about \$5,000 collectively, and circulating libraries with a total of 34,917 books.

THERE are two opinions as to impeachment in the United States, arising out of the vague wording of the Constitution: 1. That an impeachment can be ordered only for crimes on which the defendant is also liable to indictment; and 2, that it can be ordered whenever the House thinks that a high officer has been guilty of acts which, though not criminal, should cause his removal from and disqualification for office. These questions are yet unsettled. Only two of the seven persons impeached before the Senate have been convicted; of these Judge Pickering was convicted on March 12, 1803, by a strict party vote. Judge Humphreys, who had not resigned his office to become a Confederate judge, was convicted on June 26, 1862, unanimously; but this impeachment was merely formal, that his office might be declared vacant. Our system of impeachment is out date, and probably will not be used more frequently in the future than in the past.

## Typewriting.

Many authors find the typewriter useful for copying; but anything that is to have the literary touch must be carefully worked out with the pen. And that is not simply a matter of practice—though to be sure it is possible that it may be. That is, if one were trained from a child to use the typewriter instead of the pen or pencil, the art of composition might come naturally to him when fingering the keys. But I greatly doubt whether it can be learned late in life. The typewriter, like many other inventions, is not an unmixed blessing; at the same time, every manuscript offered for publication ought to be typewritten.

Would-be authors would find it to their advantage to go to the small expense which the copying of their efforts by the typewriter would entail. Editors are much more willing to examine such manuscripts than those which are written in uneven, scrawling and cramped hands, even if there be some individuality about these. It is not individuality that the average editor is looking for; it is something fresh, striking and original, and he is loath to take the trouble to decipher bad handwriting on the bare chance of finding something worth his while. So my advice to the young men and young women who add so much to the Government's postal receipts year after year is to have their productions typewritten. They will save postage, too, as a typewritten manuscript is less bulky than one done by hand.

## New Way of Doing It.

The two men who had been sitting together in the seat near the door of the car became engaged in an animated conversation, and their loud voices attracted the attention of all the other passengers. Suddenly one of them rose up and said:

"Ladies and gentlemen, I appeal to you to decide a disputed point. My friend here insists that not more than three persons out of five believe that they have souls. I take a more cheerful view of humanity than that. Will all of you who believe you have souls raise your right hands?"

Every hand in the car went up. "Thank you," he said with a smile. "Keep them up just a moment. Now, will all of you who believe in a hereafter please raise your left hands also."

Every left hand in the car went up. "Thank you, again," he said. "Now while all of you have your hands raised," he continued, drawing a pair of revolvers and leveling them, "my friend here will go down the aisle and relieve you of whatever valuables you may happen to have. Lively, now, Jim."

The test of a man is not whether he can govern a kingdom single-handed, but whether he can govern himself, and thus have his private life tender and considerate so as to make his wife and children happy.

# MICHIGAN AND CANADA

UNITED BY AN AVENUE UNDER THE ST. CLAIR RIVER.

Completion of the Longest River Tunnel in the World—Breaking the Tunneling Record—Progress at the Rate of 150 Feet a Week—Illustrations of Some Marvelous Machinery in Operation.

THE great railroad tunnel at Port Huron, Mich., is practically completed, and trains will be running through it by the end of the year. The United States is now connected with Canada by an avenue under the St. Clair River. It is in several respects the most notable and engineering feat of its kind on record. It is the longest river tunnel in the world, being 6,050 feet in all, 2,300 feet of which is under the river bed. Its outside diameter is 21 feet. It is the first cast-iron tunnel of its kind. It has been constructed at an unprecedented rate. Its prosecution has been attended with fewer casualties than any other similar work, one broken leg being the extent of the accidents, excepting two deaths of workmen indirectly due to disregard of the company's orders regarding the use of air pressure.

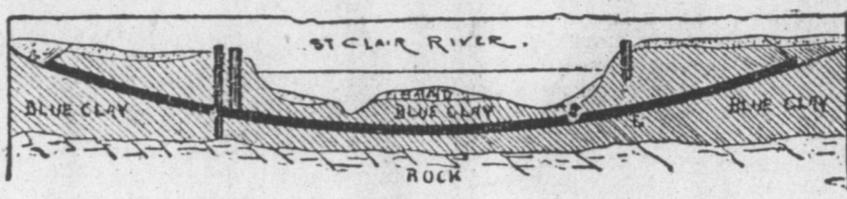
What is perhaps yet more remarkable, the cost of its construction will come within the first estimate of three million dollars.

It is a little more than one year since the tunnel proper was begun, the steel shields having been lowered down inclines into the cuttings in August, 1889. Work on the cuttings, however, was begun in January, 1889, and test shafts

front of the shield dug out and carry back the earth through the shield. By the advance of the shield, the hood, within which the iron or masonry tunnel is built, is drawn partly off from and ahead of the constructed tunnel, thus leaving the hood empty. The pistons of the hydraulic jacks are then shoved back into their cylinders, and a new section of tunnel is built up within the hood as before described. The shield is then pushed ahead, and so on. The extreme end of the tunnel is always within and covered and protected by the hood. In this manner the earth is rapidly excavated or bored out and the tunnel built without disturbing the surface of the ground.

Each shield is circular, 21 feet 7 inches in diameter, 16 feet long, and is built of plate steel one inch thick. It is divided into twelve compartments by means of two horizontal and three vertical stays, which are built up to a thickness of two inches. These stays have a knife edge in front and extend back ten feet, leaving six feet of clear cylinder, into which the end of the tunnel extends. Ten of the compartments are permanently closed and braced of angle iron placed across them. The other two are provided with heavy iron doors, which can be closed at once in case of accident or danger. These doors are situated at the bottom in the center, and through them is passed all the excavated matter. Flush with this heading (with their cylinders extending forward into the compartments) are twenty-four hydraulic rams at equal distances around the shield. These rams are eight inches in diameter and have a stroke of twenty-four inches.

The profile illustration will give a popular understanding of the proportions of the different sections of this



LONGITUDINAL SECTION OF THE TUNNEL.

were sunk on both sides of the river in 1887. The St. Clair Tunnel Company was formed in the year 1886.

This great work became necessary by reason of the growth of traffic over the Grand Trunk Railway of Canada, the Chicago and Grand Trunk, the Detroit, Grand Haven and Milwaukee, and the Toledo, Saginaw and Muskegon Railroads. The steam car ferry now in operation at this point was found inadequate and also unreliable during a portion of the year, by reason of the power of the currents (eight miles an hour) and the ice in the river. A bridge was impracticable, owing to the low level of both shores and the great amount of shipping traffic of large dimensions.

The walls of the tunnel, as indicated in our smallest illustration, are formed of thirteen cast-iron segments and a key. These segments are cast with thirty-two holes in them, twelve in each side flange and four in each end. The inside diameter of the tunnel is twenty feet. The idea of substituting these segments for brick work was suggested by Mr. Joseph Hobson, of Hamilton, Ont., the chief engineer of the St. Clair Tunnel Company, and also chief engineer of the Great Western Division of the Grand Trunk Railway. Mr. Thomas Murphy, of New York, was the superintendent of excavation. The mechanical department on both sides of the river is under the charge of Mr. J. T. Eames, the engineer who invented the apparatus for lowering the stupendous shields into their place, and also a system of cocks on the twenty-four hydraulic jacks surrounding the shield, whereby two men can do the work of twenty-four. By the simple opening of a valve, the direction of the shield could be shifted so as to follow the engineer's level.

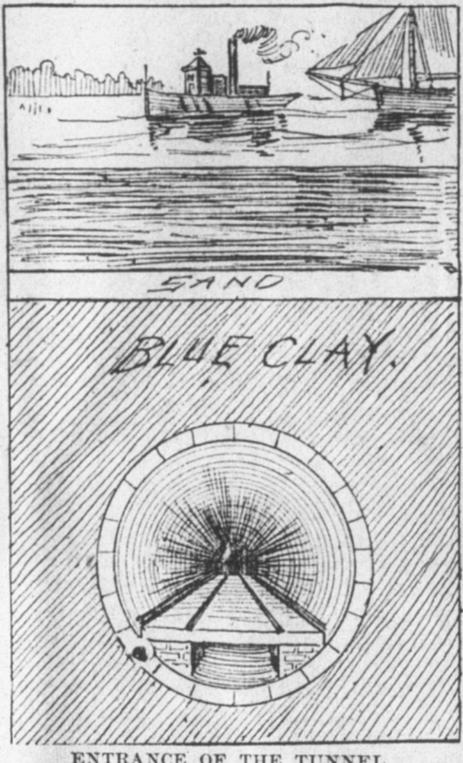
Sir Joseph Hickson at a meeting of the directors some time since expressed the conviction that the tunnel would be completed for traffic within eighteen months. The subsequent rate of progress has so far exceeded the most sanguine expectations and has so completely beaten the record of all former similar works that the talk now is that the traveling public may be inspecting the interior of this tunnel by the end of the year.

The shield to which the singular security as well as the rapidity of this piece of tunneling is due is the invention of Mr. Alfred E. Beach, of New York.

The mode of operating this piece of machinery, which has revolutionized the art of river tunneling, is graphically

tunnel, of the difficulties overcome in its completion and of the magnitude of the work. From the American cutting to the river's edge is 1,800 feet; from the Canadian cutting, 1,950 feet; under the river, 2,300. The subterranean approaches will be on the Canadian side 13,000 feet, on the Michigan side 9,000 feet. For the tunnel proper 2,196,400 feet of soil have been excavated. The cast iron lining has required 55,962,500 pounds. There have been used in securing this lining 859,242 bolts.

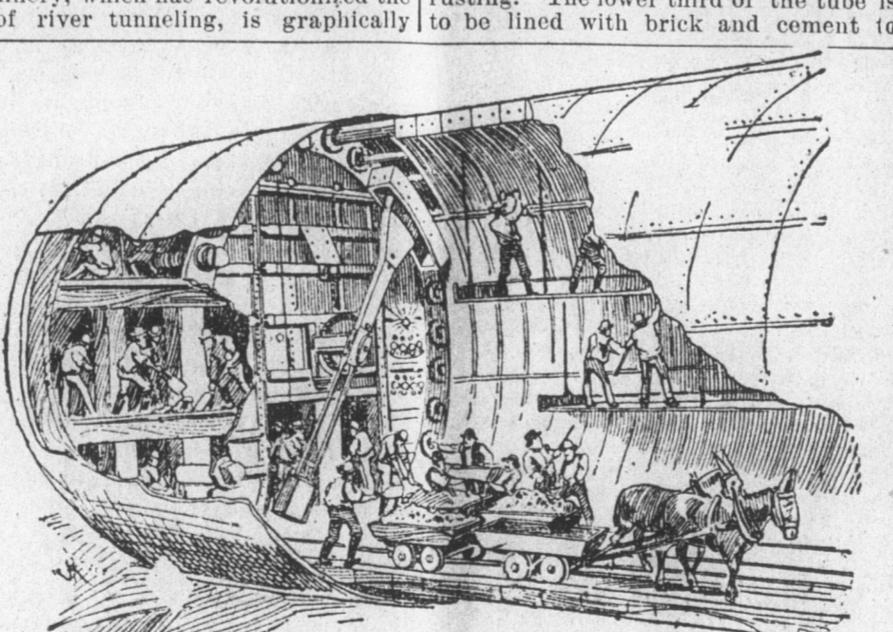
The tunnel will drain itself of the surface water entering by the approaches



ENTRANCE OF THE TUNNEL.

into an intercepting tunnel or vertical shaft 122 feet in depth, extending to bed rock, which is reached at that point. This well will be cleared by the highest pumping engine of its kind in existence. It will be over one hundred feet in height. The pump of the engine will be on the bottom of the tunnel, while the cylinders will be on the level of the ground.

The tunnel at present is dirty with clay and silt, admitted during the work of excavation. After being cleaned it is to be treated with a preparation to prevent rusting. The lower third of the tube is to be lined with brick and cement to



WORKING IN THE TUNNEL.

portrayed by the main illustration accompanying this description.

The shield which is operated simultaneously from each end of the tunneling, consists of a strong cylinder, somewhat resembling a huge barrel with both heads removed. The front end of the cylinder is sharpened, so as to have a cutting edge to enter the earth. The rear end of the cylinder for a length of two feet or so is made quite thin and is called the hood. Arranged around the main walls of the cylinder and longitudinal therewith are a series of hydraulic jacks, all operated from a common pump, each jack having cocks whereby it may be cut off from the pump whenever desired.

Every hand in the car went up.

"Thank you," he said with a smile. "Keep them up just a moment. Now will all of you who believe in a hereafter please raise your left hands also."

Every left hand in the car went up.

"Thank you, again," he said. "Now while all of you have your hands raised," he continued, drawing a pair of revolvers and leveling them, "my friend here will go down the aisle and relieve you of whatever valuables you may happen to have. Lively, now, Jim."

prevent deterioration of the casing by the brine that leaks from meat cars.

One railway track will be planned on both sides. The ties will be of iron, conforming in their curve to the bottom of the tunnel.

Coke engines will be used for motive power, in order to avoid as much as possible gas and smoke. An electric light station will be maintained on the Port Huron side, and the tunnel will be at all times as light as day.

As soon as the present tunnel is in

running order another alongside of it will be begun, using the same machinery, with the exception of the shells of the pair of shields, which it was impossible to remove.

The Difference.

Mr. Chugwater (explaining matters to visitors)—My wife is generally well, but she is suffering to-day from rheumatism, influenza, toothache, a sore thumb and an inflamed eye. In her case it never rains but it pours.

Mr. Chugwater (explaining matters also)—I don't make any fuss about it, though. I am not like my husband.

He never pains but he roars.

## SEARCHING FOR A STOLEN MULE.

BY FIL DOOZER.

GENTLEMAN was traveling through the central portion of Missouri in quest of a stolen mule. He jogged along at an indifferent pace, making inquiries occasionally regarding his lost animal. About four o'clock in the afternoon he rode up to a fence in a neighborhood known as Blind Pony Ridge. A man was on the inside of the fence hacking and slashing around in some tall weeds with an old scythe that was entirely too dull to accomplish very much.

The traveler addressed him very politely, and, after introducing himself, desired to know if the farmer had noticed anything of a strange mule during the last few days.

"Now," said the man. "Been none az I've seen. Yer didn't 'spose this naborhood waz harborin' other people's stock, did yer?"

"Oh, no," replied the stranger.

"Wall, guess yer better not," said the wood-cutter. "The people what lives in this naborhood air quiet an peaceful. I waz just goin' ter say yer couldn't git down often that ere hoss an' say everybody in these parts waz a harborin' strange mules."

"I merely asked for information," replied the traveler; "I had no intention of insinuating that any one was trying to harbor my mule."

"Wall, that's all right, stranger. We don't want no man ter come here an' say this ain't no 'onest naborhood."

"As I was going to say," remarked the gentleman, "I had a gray mule stolen several nights ago, and back there at town I got information which led me to conclude that my animal had been brought in this direction."

"See here, stranger, don't yer cast no reflections on this 'ere naborhood?"

"Indeed, sir, I had no idea of doing such a thing."

"Good thing yer didn't 'cause no man could git down often hiz hoss where I waz an' east slurs on this 'ere naborhood. We are quiet, law'bidin' citizens here, we are."

"I merely desired to know if you had noticed anyone riding, driving, or leading a strange mule."

"An' yer didn't mean to put a bad name on this 'ere naborhood?"

"Why, certainly not."