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AN ELECTRICAL YARN.

Some of our city newspapers lately manufactured a sensational story about the wonderful pranks of Edison's electricity, as exhibited at the corner of Ann and Nassau streets. The New York Sun produced the longest yarn on the subject, late how passing horses, when they touched their feet on a particular spot in the pavement, instantly received an electrical shock which made them cut up all sorts of shines and didoes. Amusing details were given: the strong cart rush off on a gallop, etc. It was stated that none of the crowd of spectators, nor the policemen, nor the learned reporter Vice President and Manager of the Edison Light Company, new and startling information from another employe of the as the pilot of a steamer does, by a system of signals. Edison Company, who evidently knows more about electricity, or thinks he does, than Manager Eaton or even Mr. way traveling cannot fail to receive consideration. It is Edison himself. The Sun gives the following:

from one of the chandeliers to a gas pipe caused the wire fatal to a hundred passengers. supplying one of the currents to become grounded. At the same time a loose cap at Nassau and Ann streets, working substantially everything required in the care of the engine, intermittently upon the wire supplying the other current, caused that to be grounded also, and an earth circuit was established. It was a mild current, and part of it was appropriated by the horses that passed a certain point, because at the occasion might demand. that point the ground was not so good a conductor as the horses. It was a mistake to say, as was said on Thursday, the that the direct current from the Edison dynamic machine that the direct current from the Edison dynamic machine could not be felt. It pricked and tingled very perceptibly, the simple microscope is the operation of cameo cutting as and was enough to make a horse kick up. The current that described in an article in Our Home and Science Gossip: passed, Mr. Johnson said, was the direct current, and not an induced current. As soon as connection with the loose at a table covered with tools, varying from a triangularlighted all about the neighborhood yesterday, including one steel wire fastened in handles. Very fine files and knitting at 88 Nassau street, next door to the house in which the needles, set in wooden grips and ground to infinitesimal loose cap was found."

nothings. *****

AMERICAN INVENTIONS IN THE EGYPTIAN WAR.

Among the supplies for the British army in Egypt mentwo hundred "Abyssinian wells," by which name American with critical minuteness. Then he went at it again, workdrive wells are known in England, from the circumstance ing slowly, scratching over the same line again and again, that they were first used by the British army in the and always examining after each scratch. He changed his Abyssinian war. It is estimated that two hundred wells of tools as he went on, and from the darning needle descended the capacity ordered will furnish from two to three million to a trifling little fragment of steel wire, not as thick as an gallons of water a day, and make the army independent of ordinary sewing needle, set in a slender handle. the surface water sources of the country. • Seeing that the fresh water canals are largely in the control of Arabi, the had drawn with his pencil had quite vanished, and a thin, where in the desert.

empts to strengthen the forts about Alexandria under while it had been cut away around it to the lower

fortified places along the Suez Canal, the same guns on the gunboats and on shore have been in constant use.

It is not so well known that the small arms of the British soldiers are but slightly modified American guns, made with machinery patterned after that developed in the shops of and even illustrated the locality of the pretended electrical Springfield, Mass. The system of fixed ammunition for disturbance by a diagram. The Sun's story went on to re- small arms also, and the machines by which such cartridges are made, are all of American origin.

DUTY OF THE LOCOMOTIVE ENGINEER.

A rail way man predicts that before many years every locohorse would rear and plunge; the peddler's old hack would motive drawing a passenger train on a busy railroad will have a pilot whose sole business will be to watch the signals, switches, bridges, crossings, and so on, while the care and himself, were able to account for the remarkable occurrence. control of the engine will be the exclusive work of the en-So the indefatigable liner hastened away to Mr. Eaton, the gineer. At present, he says, the engineer may be trying his water gauge or doing any one of half a hundred necessary and interviewed him, but got little satisfaction. He told the things, when he ought to be looking at a signal. When reporter that the electrical wires were two or three feet below trains were fewer and the speed less, an engineer was all the surface of the ground, and that it would be impossible that was needed; as the speed is increased and the demands for a current to come up from them into any horse on the upon the engineer's attention are multiplied, he has more surface. But our penman was not to be put off by so plain than he can do. He must be relieved by a new man, in and sensible a statement; so he rushed around some more, front of or over the engine, who will have nothing to do with until at last his perseverance was rewarded by obtaining the engine, but will watch the road and direct the engineer,

Any suggestion calculated to increase the safety of rail-

safe to predict, however, that the foregoing prediction will "Mr. Edward H. Johnson, of the Edison Company, said never be fulfilled, for the sufficient reason that to place a yesterday that Mr. Edison and his assistants had spent the second personality between the observation of a signal and night in an investigation of the wires about the neighbor- the manipulation of the engine would be to delay action and hood of the disturbance, and that the cause of the peculiar invite disaster. With his hand upon the throttle the engieffect worked upon the horses which passed through Nassau neer can do the thing required in any emergency in less street had been discovered. At the time of the disturbance time than it would take to tell another to do it, however Mr. Johnson was engaged at the light in Drexel & Morgan's perfect the system of signaling; and with a train running a building at Broad and Wall streets, and a wire reaching hundred feet a second, a fraction of a second's delay may be

> On well regulated roads the engineer's assistant now does leaving the engineer free to keep constant watch of the road. The proposed pilot could do no more, and would be less fitly placed to secure the instant performance of the duty

Cameo Cutting.

One of the best examples of adroit manipulation under

A visit to a cameo cutter's workshop found him seated cap was closed the phenomenon ceased, and buildings were pointed steel instrument to the most delicate pointed bits of points, figured in the lot. On a pad of leather, before the It is almost unnecessary to say that this stuff about a cameo cutter, was a block of wood just big enough to be chandelier wire and an "intermittent cap" half a mile apart grasped with his hand, and cemented to the middle of it was producing an earth circuit and a "mild current," under- an oval object that looked like a piece of alabaster, just big ground, and so making the horses kick up on the pavement, enough to make a seal for the finger of a man who did not is the silliest of bosh. If this is a fair specimen of the elec- object to wearing large rings. Upon this the artist was just trical intelligence of the people that the Edison Company finishing a copy, with a pencil pointed to needle fineness, of a sends around to lay their wires, they should be looked after; photograph in profile of a gentleman, which was leaned for good work cannot be expected at the hands of know- against a little photograph easel before him. Having finished the outline, he laid his pencil by, and taking up a fine wire tool he scratched the pencil mark around with it. Then he took a darning needle with a sharp point and scratched the line deeper. He worked with a magnifying glass at his eye, tion is made of driving apparatus, tubing, and pumps for and stopped continually to inspect the progress of his work

With this he scratched and rescratched, until the lines he success of the invasion may be largely contingent upon the fine streak of a dark colorhad marked the outline of the head ability which drive wells give of obtaining water any- he had been tracing his way around. Next he took one of his burin-like tools and commenced again. This time he This, however, does not exhaust the indebtednesss of the worked on the outside of the outline, cutting and scraping British forces to American inventors. The great war ships at the surface until the white turned gray, then brown, and of England are supplied with the Brush electric lamps in- finally vanished, leaving the face in relief, surrounded by a vented at Cleveland; and, as every reader will recall, it was black ground-that is, the portrait remained intact in the by means of the powerful lights of the fleet that Arabi's white substance which formed the outer layer of the cameo,

The Detection of Chloride of Lime in Water. By A. ANTHONY NESBIT	cover of night and contrary to agreement, were detected	layer. The portrait or figure is then modulated upon its
Volumetric Determination of Lead. By M. BUISSON		
Continuous Equilibrium Weighing Apparatus1 figure	lights played a not less important part in directing the	are left square to the dark ground.
Meat Transport from New Zealand.—New method of shipping refrigerated meat	movements of the ships at night, in guarding against sur-	This is necessary, as, if they are gradually rounded down,
III. HYGIENE AND MEDICINE On the Infectiveness of Tuber-	prises, and in watching the movements of the enemy on	the outline becomes undefined toward its juncture with the
cle, with special reference to Tubercular Consumption. By Dr. WM. PIRRIE, Professor of Surgery, University of Aberdeen 5570	shore.	relieving surface, owing to the white of the raised portion
Hypodermic use of Amyl Nitrite	During the bombardment the most effective service was	being partially transparent and permitting the dark to show
1V. NATURAL HISTORY -How Animals became Carnivorous 5569	done by turreted vessels; and the revolving turret is an	through it when it is thinned down. Care is taken to finish
The Pompanoes of the Western Atlantic.—The common pompano.	American invention.	this dark surface as much as possible with the cutting tools
—The Carolina pompano.—The round pompano.—The African pompano.—The banner pampano	The machine gun, another American invention, has	and so separate the white from it as to leave it smooth and
V. HORTICULTUREThe Horticultural Exhibition at Paris, May,	proved an extremely efficient arm for the invading forces.	unscratched. A final polish is given it, however, with putty
1882.—1 figure.—Viewof the Exhibition of the Horticultural Society		powder applied dry with a stiff brush, but the utmost care
of France		is necessary in this operation, as the slightest slip will ruin
Horticultural Suggestions.—Culture of quinces	with guns of this type, were able to disperse the Alexan-	the work. This is the cameo cutter's work, the mountings
VI. MINERALOGY.—The Mineralogical Localities in and around New York City, and the Minerals Occurring Therein (continued	drian "looters" and restore order in the afflicted city, where	
from No. 344). Part II. By NELSON H. DARTON.—Pennsylvania	many times their number would have failed without such	
Railroad cutBergen HillStaten IslandGranitevilleThe	aid	
iron min es		THE first telegraph line in this country is believed to have
VII ASTRONOMY - Proper Motion of the Stars. By PROF. R.	· · ·	
GRANT	Alexandria, and later in the capture of Shaluf and other	been established on hong Island, by Harrison A. Dyar.