

WONDERS OF SCIENCE

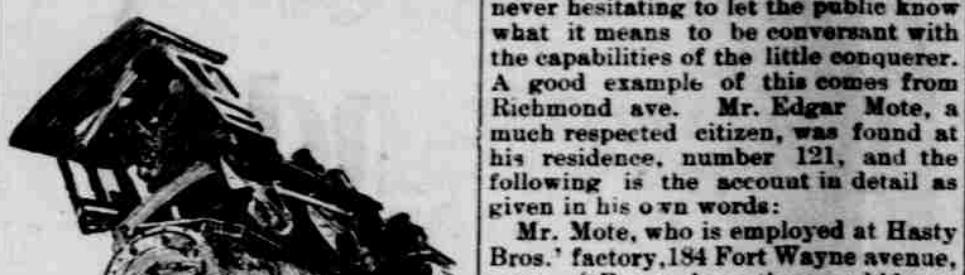
HOW A LOCOMOTIVE WAS SCOOPED UP IN NEW ENGLAND.

Actions of Electricity—Startling Effects of "Electrocat" Whirlpool Produced and Bacteria Killed—Rotation of Objects in Midair—Diamonds Is a Volcano.

A strange accident recently occurred on the Clinton and Fitchburg branch of the New York, New Haven and Hartford railroad. Through the neglect of a telegraph operator, says Locomotive Engineering, an engine with a snowplow passed the station where a stop order had been received and met a mile train on the road. The engine of the milk train was scooped up on the boiler of the snowplow engine and remained in the position shown until taken to an engine house. An unusual thing about the accident was that nobody was even hurt. There had been five men in the engine house, and all escaped from the collision and escaped without injury. The fireman of the milk train engine was knocked from the cab into the snow, and he escaped with a few slight bruises. The engineer of the top engine and the engineer of the bottom engine both remained at their posts, and neither was injured.

The phenomena of electricity of a frisky character will amaze many people some of its actions on the trivvy or about the street cars or in connection with electric light wires when it breaks loose, which are all of too dangerous a character to be amusing, notwithstanding not all its pranks on their own desks, though no "live" wire be within a mile of them, writes George J. Varney in Lippincott's. It does not always occur to our minds that electricity is playing a little trick when we take a

sheet of writing paper from a pile and find it does not come alone, but drags along another sheet or more, "sticking closer than a brother." Similar action of the immense sheets of book paper on a printing press in certain states of the atmosphere—when one is slid on to the form of type and has one or more others partially adhering to it for a moment, then taking flight away from the press to the dizzy heights—frequently keeps the pressmen in an uncomfortable state of fidgets. Such action results



SCOOPING UP A LOCOMOTIVE.

from the attraction and repulsion of frictional electricity—the same kind that is produced by the chafing of the silk flaps against the rotating glass disc in a certain kind of electric machine. An experiment with the same kind of electricity, which can easily be tried, is to apply gentle friction to a thin piece of cloth or paper, when on bringing it near the wall of the apartment it will be attracted thereby and adhere to the surface—be it wood, plaster or paper—for a brief time.

The Popular Science News says that an interesting discovery, from a geological point of view, recently made by an explorer in the mountains of Witzis Hook, Natal, proves La Génie Civil. On the summit of an extinct volcano, on the edge of a lake that occupies the crater, soundings revealed a layer of sand inclosing small diamonds.

It would be interesting to know whether these diamonds were there accidentally—that is, as the result of washing operations carried on by the natives—or whether this discovery corresponds to an actual vein of diamonds from the hills of Witzis Hook are not situated in regions known to be diamond bearing.

On this last hypothesis the presence of precious stones in the crater of a volcano would doubtless throw some light on the formation of the gems in nature.

Rychnowski, the electrician of Lembit, claims to have discovered an electric fluid, which he calls "electrocat." The discovery has caused a great sensation on the continent. He obtains it by electrolysis, but it is not identical with electricity. Its effects are declared to be startling, producing light and causing Geissler tubes to emit fluorescent rays. It works photochemically, rotates objects, drives small whirlpools in water and kills bacteria. Metal and glass thereby can be charged with electricity, and the magnetic needle changes direction under its influence.

New Quick Firing Gun.

Messrs. Kynoch of Birmingham have for some time past been engaged in producing a weapon a long way ahead of any other gun of a similar type. By turning out 1,000,000 cartridges a minute, it is shooting, and 600 magazine bullets are discharged per minute. The gun, which weighs only a hundred-weight, is single barreled and while in action is kept cool by a water jacket, which is filled automatically. The firing action is supplied with cartridges by an endless belt, which passes through a box and collects the cartridges. The gun is so light that three men can lift it and it is made to swing from right to left, it will probably prove to be one of the most deadly weapons of modern warfare.—Westminster Gazette.

TREASURES OF MEMORY.

Long years ago when we were young Life was a pleasant dream, And then the bright flowers threw Up their sweet perfume in streams. We thought upon the future Then as beautiful as fair. And then the world's side Built castles in the air. Oh, we were light and joyous then— Yet the world was cast down to laugh To see us look so gay.

Don't you remember how you told Sweet tales of fairy lore, But the world would grieve if you did. It is easier to restore than to renew. We in our pure innocence Believed them to be true— You from your childhood, guiltless faith, I from my training in youth. And how I said in years to come We'll live beside that stream. And when the world's side laughed, So glorious was our dream.

Long years have passed, and yet you might Believe in fairies still.

For smooth has been your stream of life And now the world's side Built castles in the air. Sweet o'er your pathway shine, While sorrow's waves within their depths

And while your innocence retain.

Your innocence retain.

Mine has been wrecked amid the shoals

Of riches and of fame.

—Treasures of Memory.

—Treasures of Memory.