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# VISIBLE ELECTRIC CURRENT

Only Man Who Could Really Undertand Mystic Current-Campaign to Have Principles Under-stood by the Public.

"The man who conceived the idea of fourth dimension," said the Bromide, "is the only sort of man who could really understand the action of octric current."

The Sulphite looked pained.

What is your trouble?" he asked. We know more about the action of move the larger their orbits, and the ing in question followed Mary and her law of gravitation."

The Sulphite was the foremost enderstood. Bromidic remarks like the above, and the fact that the public will accept electricity's first cousin, heat, electric current stresses from degeneall its manifestations, but balks rating into heat motions. If his wire, electricity itself, are equally irri- for instance, is too small to carry the

ting to its engineers. "That's all very well for you to say," plied the Bromide, "but do you restion of it. He saw an apple fall out t a tree. I can see an apple fall out

"Do you remember how Benjamin-Franklin fished for an electric current with a kite?" said the Sulphite. He saw an electric storm."

But there are constant natural manstations of the law of gravitation." ald the Bromide. "You see them all the time. One reason why the idea of lectric current is more diffiecult to grasp is that we don't see its manifesconduction of heat." ations so often.

"Oh, Great White Way, where is thy instre?" mourned the Sulphite. "But see what you mean. Electric current moves in solid substances-generally in wires. Therefore it is more difficult to deduce the cause from the effect." "Eractly," said the Bromide. "What moves? How do you know it moves? I'm from Missourl."

"Until a decade or two ago," said the Sulphite patiently, "it was only in fairy tales that, makes to the magic of a kind but indiscreet fairy, a charmed prince could gaze through a solid wall at the beautiful imprisoned prins. Now the roentgent ray is famil-

iar to everyone." "I'll even admit that I can see

through a solid substance," said the romide obstinately, "because I've and it. But, as I remarked before, a can't see an electric current

MARY'S LITTLE LAMB

year on a million engine shafts, and Really Did Follow Her to School and Was Ejected by Teacher It is pleasant to find that John Roul-

(Continued from Page Nine.)

Well, said the Bromide, conceding the point, "what does electric current do when it gets there? In what form does it come out at the other end of and Mary Sawyer, a school girl of 8 does it come out at the other end of the wire if the wire is not twisting or lived in the vicinity. She afterward construction and flood prevention pro-

became Mrs. Taylor and the monu-"It comes out in the form of motion ment which surmounts her grave in which is dangerously akin to heat," the old cemetery at Waverly, Mass.,

replied the Sulphite. "Heat has been tells her history. defined as molecular motion. All mol-The insident, which Roulstone made ecules are in motion constantly as you famous in verse, as related by Mary's would see if you could magnify any would see if you could magnify any small solid substance to the size of the earth. The faster the molecules move the larger their orbits and the

electric current than we do about the substance expands. This effect is brother Nat, to school, They discovered it as they were crossing a stone "Then electricity is some kind of a wall and at the suggestion of Nat, the gineer of the Crocker-Wheeler Compa-ny, which is making a campaign to the same way that heat is a motion of house and hid in one of the desks,

stance. I have shown you how it can

be done. It is done every day in the

the propeller shafts of great ocean-

going liners. This is mechanical pow-

undulating?"

known as heat."

low zero Centigrade.'

Since it has been shown to be fool-

current it gets heated and some of the ish to try to shoot icebergs to pieces with the navy's guns there seems no electricity is destroyed." reason why heavily armed vessels "It all seems clear," said the Bro-

ar how Newton discovered the mide, "except as to what makes it should be sent into the steamship law of gravitation? He saw a manifes- travel. Why doesn't your electricity lanes during the Spring as guards for shipping. The use of the cruisers Birstay in one place?" Why doesn't heat stay in one mingham and Chester proved expena tree, but I can't see electric cur- place?" asked the Sulphite. "Heat sive because of their large consumpone end of a poker red hot, and the tion of coal. The use of colliers or other end will soon become too hot gunboats is recommended in their

stead. Equipped with wireless the for you to handle." smaller vessels will serve the same "I know that's true, but why is it?" "Because heat is a motion of the purpose as the cruisers at much less molecules. Closely grouped as they cost and aside from the difference in molecules. Closely grouped as they cost and aside from the difference in adjustment of the amounts as far as been speed should render just as effective possible to an equitable basis of dis-not oscillate without communicating News.

News. their motion to neighboring molecules. This propagation of the motion of heat Pennsylvania far outranks all other from molecule to molecule is called States in the value of its mineral out-

"And is the conduction of electricity put. In 1917, this State contributed, the same sort of process?" exclusive of pig iron, 24.7 per cent of "Exactly. Only electricity moves the total mineral output of the United infinitely more rapidly, because is is a States. The reason for Pennsylvania's more orderly motion. There is what I should call more team wrok among the molecules twisted by an electric current than the molecules moved by in the molecules moved by of coal. It is almost exclusively the integration of coal. It is almost exclusively the integration of worriment.

heat. When the molecules have no source of anthracite, and produces Several motion at all the substance is at 'ab- over one-third of the total bituminous- tle of Visiol and commenced to give solute zero'-about 461 degrees below output. Pennsylvania ranks second, zero Fahrenheit, or 273.7 degrees be-next to New York, in the value of its provement in her health and ap-"B-r-r-r!" said the Bromide.

of 38 men, including nearly the entire official staff of the International Association of Bridge & Iron Workers, are angry because a public school of conspiracy in the promotion of ex- teacher told the children there is no it contains in a delicate combinaplosions in non-union works, does not such being as Santa Claus. Doesn't tion the two most world famed tonics carry with it severe punishment for every grownup remember the day the guilty men, even when their con- when he first learned the mythical na- building elements of cod liver oil,

#### spiracy resulted in the loss of many ture of the childhood saint? Wasn't it with all the useless grease eliminat-Have you ever thrown a stone into lives, but it is nevertheless a lesson of like losing one's very best friend? The ed, and tonic iron for the blood add-

## FOR WATERWAY IMPROVEMENT

THE MORNING STAR, WILMINGTON, N. C., WEDNESDAY, JANUARY I, 1913

stone's "Mary had a little Lamb" was co-operative practice on the Mississipjects.

The hearing on the Mississippi ri ver's difficulties, in the discussion of the levee problem, disclosed that local co-operation in levee work had made excellent progress up to the disastrous flood of early last Summer, the extent of the vast destructiveness of which convinced all interests that the safest dependence to prevent the recurrence of these numerous disasters is for the Federal government to be given complete control of the construction and care of the levees of the great water highway. It was particularly emphasized that the speedlest possible improvement in accord with the policy was now more than ever manifestly the most vitally important of all river projects, in view of the approaching completion and opening to the commerce of the world of the Panama

Canal The estimates from the engineers of the army for all river and harbor improvements call for the expenditure of about \$44,000.000

There are millions more already involved in former recommendations. At the first meeting of the Rivers and Harbors Committee after the holidays an effort will be made looking to an adjustment of the difficulties indicat-

All of last year I went through without furnishing my home but I'm going to say this: I owe a duty to my children, to give two considerations of public economy

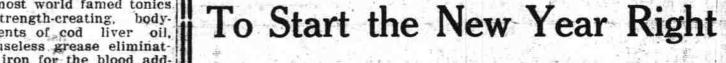
and the superior importance of public works already projected or commencfriends come in. I have just been looking at some new furniture. They look

### MOTHERS OF PUNY CHILDREN

ed them sent right out. May Find Help In This Letter onths ago I secured a botiure from it to her. I soon noticed an im-

manufactures, and stands first as a pearance. I gave her in all three bot mineral producer in cement, coal, tles and from the good it has done coke, pig iron, lime, mineral paints, her I can truly say it will do all you claim." J. Edmund Miller, New Ha

> ven. Conn. The reason Vinol builds up weak, ailing children so quickly is because -i. e., the strength-creating, body-



Resolved, to have nicely furnished home.

so attractive to me that I bought lots of new things and order-

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Jeweler.

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