"And you tell me," said he, "that by a cuttin' of these bolts on a lead screw bolt cutter you can get a true thread, and that by a watchin' of all these gages and taps and hobs you can make all the bolts in one shop and send 'em to the other shops and they'll fit, and they'll go in with a little 6-inch socket wrench without squarin' the ends. Well, now, tell me, what ye've saved."

"Trouble," said Skeevers.

"Money," said Purves.

"Well, now, boys, ain't you a settin' up a straw man to knock down? Ain't the old threaded-all-the-way staybolt good enough? Ain't the common bolt cutter and the home-made tap good enough? What's the use in cussin' the hoss that's carried you over the creek?"

"I'll tell you," said Skeevers, "you say you are running 130 pounds pressure yet on a

ters of a pound per bolt, a saving of  $4\frac{1}{2}$  cents each where 6 cent material is used—this is enough to pay for cutting the bolt and tapping the hole. Besides that there—"

Tom touched Skeevers' foot and winked.

Skeevers stopped talking and lit a cigar—the old man was asleep.

## Section 1Section 2Section 2Section 3Section 3Sect

The curious-looking locomotive 'here shown has been built by the Curtis Manufacturing Company, of St. Louis, for logging purposes, and to run on track where wooden logs are used for rails.

The cylinders are 7 x 10 inches, and transmit power to a supplementary shaft, which carries sprocket wheels that transmit the power to the driving wheel axles I refer to is his reckless statemartments in out any ground of truth. You d to differ-instances of this in his speech at a rail-Now, the reason of this lies in the the rail stitution of his mind. The moment rail begins to talk all his mental operation ut cease, and he is not responsible. He is, in fact, much like a little steamboat that I saw on the Sangamon river when I was engaged in boating there. This little steamer had a five-foot boiler and a seven-foot whistle, and every time it whistled the engine stopped."



## Our Coal Supply.

In an article contributed to the "Tradesman," Frank G. Carpenter says: "There is enough coal in Alabama to do all the manufacturing of the United States for



NEW FORM OF LOGGING ENGINE.

small road using small boilers. Your company sell coal and let you waste money on your engines. We have to watch every cent, have to spend money for these tools to save money in the work and repairs.

"First, we do a better job. Second, we save money.

"We upset our bolts, at first using a straight bolt as shown in this lower cut—what's the use of a staybolt larger than the root of the thread?—this leaves the skin of the metal on, is stronger, prevents rust, and instead of threading 5½ inches of bolt we only thread 2½ inches—less work. We save more than half their cost by cutting them all at one place especially fitted up for it. Now, in this upper cut here is shown Mr. Purves' latest design of staybolt. He retains all the advantages of the first form and saves, on 3½-inch water space bolts three-quar-

by means of chains. The speed at which the engine is intended to work is about 5 miles an hour, and it is said to give very satisfactory service.



## Whistle Too Big.

Some of the most amusing anecdotes are told about President Lincoln, relating to incidents of his life when he was a young lawyer practicing in the courts of Illinois. It is said that he was once engaged in a case in which the lawyer on the other side made a very voluble speech full of wild statements to the jury. Lincoln opened his reply by saying: "My friend who has just spoken to you would be all right if it were not for one thing, and I don't know that you ought to blame him for that, for he can't help it. What

many years to come. I was told at Bessemer that the available coal of Alabama alone, if it could be put into a lump, would make a solid chunk 70 miles long by 60 broad and 10 feet thick. Such a lump would, it is estimated, furnish 10,000 tons of coal a day for more than 11,000 years, or 1,000,000 tons a day for 115 years.

"But Alabama has only a small amount of the great Appalachian coal fields. These fields end somewhere in Alabama. They run from there northward a distance, it is said, of about 900 miles, and they are from 30 to 180 miles wide. They furnish about two-thirds of all our bituminous coal output, and we produce, you know, about one-third of all the coal of the world. In 1894 we mined 170,000,000 tons of coal, while the whole world produced only 570,000 000 tons. The only country which beat us that year was Great Britain."