# Soinntific Ammiam. 

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

Scientific American,
CIRCULATION 14,000.
At 123 Fulton Streat, New York, (Sun Building,) and reet, Boston, Mass.
BY MUNN \& COMPANY
The Principal Office being at New York. Barlow \& Payne, Agents, 89 Chancery Lane, London Goo. Dexter \& Bro., New York City Stokes \& Bro., Philadelphia.
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## Noble Act of a Girl.

An incident has been relatad to us exhibiting unusual thoughtfulness and caution, if not heroism, on the part of a young girl, that deselves more than a passing notice. A few evenings ago, juat after dark, a young female residing on the Railroad, near Sykesville, observed that the rain had caused a part of the embankment to give a way, and entirely cover up the Rail road track. Knowing that the train of car would pass along in a short time, she hastily and alone procured a light, and set to work to remove the obstruction. In a few minutes, however, she heard the train approaching at a fearful rate, and abandoning her humane effort to clear the track, she took her station in the middle of the road, and by waving the light to and fro, succeeded in attracting the attention of the Engineer, who immediately stopped the engine. In a few moments more, had it not been for the great presence of mind, courage and thoughtfulness, of this young girl, the whole train might have been drshed to pieces. Her noble conduct is deserving of the highes reward.-[Balt.Clipper.

## Important Decision

The Supremie Court, in session at Saratoga have decided that the Northern Railroad Company are entitled to receive subscriptions to their capital stock. The case upon which the decision was made was the Company versus. James Duane, and is a reversal of a decision made in the same case, says the St . Lawrence Republican, in the courts in this county about a year ago. A number of cases were pending on the result of this case, which settles the question unless carried to the Court of Appeals.

Injuries by Locomotives.
The Commitee on Agriculture, of the House of Assembly of New Jersey, has reported a bill to prevent injuries by locomotives, which re quires the railroad companies to separate their tracks from public highways by a fence, whenever they run beside each other. In default the company is liable to pay the amount of dam ages, and a fine of $\$ 50$ besides
The Worcester Railroad Corporation has ap plied to the Legislature of Masachusetts for an increase of capitalof $\$ 500,000$, which will raise the capital to $\$ 5,000,000$. This with the sal of property worth $\$ 300,000$, is expected to relieve the Company from debt

It is estimated that the depression of Rail way property in Great Britain, in 1849, is no less than eighty millions sterling, $\$ 400,000$, 000.

The receipts of the Syracuse and Utica Rail road during the year 1849, from passenger and all other sburces, is about $\$ 465,000$.

The receipts on the: Syracuse and Auburn Road, very nearly reach $\$ 200,000$.

A brass rudder has been cast in Philadel phia for the steamer Columbia. It is sixteen feet long, three feet and three inches wide in the blade, and weighs nearly 30 tons.

## POTTS' PNEUMATIC PILE DRIVING FOR FORMING FOUNDATIONS, FOR PIERS, EMBANKMENTS, \&c.



On our list of Patents, this week, there will exhausted from the inside of the tube, and as found one to Mr. Potts, of England, for the exhausting process proceeded, the pile made forming foundations, \&c., by a new plan for its way downwards until it sunk to the depth inking tubes, caissons, \&c.
The proprietor of the patent for the United tates, is Mr. Charles Pontez, No. 71 Cedar, treet, this city.
This engraving represents a pier supported on pneumatic sunk piles laid down by Robert Stevenson, Esq., C. E., on the Chester and Holyhead Railway. The Viaduct is skew and carried over a branch of the sea in the island of Anglesea. It consists of two land piers built in the usual way, and of the centre pier laid on a sand bank. It is thirty-six feet long and three feet wide, builton nineteen cast iron tubes, A, each 16 feet long and one foot diameter. The piles were sunk by means of 2 smal double air pumps with cylinders $4 \frac{1}{2}$ inches in diameter and 17 inches stroke, worked by four men. The pumps were placed on the land piers and a lead pipe of half an inch bore was carried from the pumps, across the water to the place of driving. Each tube was placed perpendicularly over the spot in which it was to be sunk, and the square iron cap, B, placed on the top, with the lead pipe mentioned, passing At every stroke of the pump the air was the

ALLEN'S ALPHABETICAL, SPELLING, READING AND ARITHMETICAL TABLE.-.Fig 1.


This Table consists of a board or table, along the centre of which are horizontal grooves, or raised ledges forming grooves between them, that connect with perpendicular grooves, or compartments on the sides, in which are inser ted an assortment of movable blocks on the face of which are cut the letters of the alphabet, both capitals and small, the nine digits andcyboth capitals and small, the ninedigits andey
pher, and all the usul pauses and signs used
in composition and arithmetic.
The letters, figures and signs are large, so a
to be readily recognized by all the members of lange class, and from even the extremity of large school-room, and are so assorted and arranged as to be easily slid from the perpen icular grooves or compartments into the hor zontal grooves, and there combined into sylla-
arithmetical operations. When the lessons in arithmetical operations. When the lessons in ithme, fich tho blom ed to their appropriate places.
The experience of many teachers in schools of different grades, and of mothers at home (the God_appointed school for little children, next to which should be ranked the well-organized Primary School, with a bright, gentle, affectionate and patient female teacher,) has demonstrated that by accustoming the child, either individually or in a class, to select letter by letter, and move them from their appropriate case to the centre of the board, and their combining them into syllables and words, a knowledge of the alphabet, and of words, is acquired in a much shorter time and in a much more im pressive and agreeable manner, than by any of even the best methods now pursued
All of the advantages derived from the meth od of dictation, and the use of the slate and black board, in teaching children the alphabet spelling, reading, and the use of capital letters and pauses, as well as the elementary principles of Arithmetic, such as numeration, addition, subtraction, \&c., can be secured by the introduction of th

Fig. 2.


The letters do not come off, but have tennons on their lower ends, fig. 2 , to slide in the grooves, and can be moved to any part of the board. The inventor is Mr. Edwin Allen, of Windham, Conn. Mr. H. Taft, of No. 155 Madisonst., is sole Agent for the city of New York. st., is sole Agent for the city of New York.-
The following certificate will show how highly it is esteemed:-
Having examined the ingenious and useful Educational Table of Mr. Allen, for Primary Schools, and had a full explanation of its various uses, I am satisfied that it will be found a great aid in elementar principles involved in its use, are both correct principles invo
and practical.

## S. W. Seron, Supt Public Schools, New York Cit

Departure of the Arctic Discovery Ships The sailing of a new. Arctic Expedition in search of Sir Sohn Fraüklin and his gallant companions, took pace from London on the 11th inst. The expedition consists of the Enterprise, Captain Collinson, and the Investigator, Commander McClure. The best wishes of mankind go with them. They went to Davenport to await final orders.
The Enterprise and Investigator, arctic discovery ships, are both now complete, as far as their repairs and fitting are concerned, and have been taken into theriver toreceive their stores which are dailytiving from Deptford. They are fully rigged and radde: for sea. Applica tion has been madesace ar for per mission to enlarge the magazneseof both:ves sels, in order to enable them to carry a large sup ply of powder, it being intended to have recourse to that substance in getting out of the ice, in preference to the old and tedious process of sawing.

If there ever was a subject in which insani ty could be distinctly traced, in the constitution of different British Cabinets, it is cer tainly that of a Northwest Passage to the Pa cific. There is not a single working man, of the leas, common sense, without any more education than barely to write his own name, but knows that the discovery of such a Pas sage, if it does exist, would not be worth a sage, if it does exist, would
straw to the commercial woid

