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## SCIENTIFIC AMERICAN :

 CIRCULATION 11,000.At 128 Fulton Street, New York (Sun Building, ) and 13 Court Street, Boston, Mass. By Munn \& Company.
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## Doetry.

## hines.

Where shall we make her grave ? Oh! where the wild flowers wave, In the free air !
Where shower and singing bird 'Midst the young leaves are heard-There-lay her there.

Harsh was the world to her !
Now may sleep minister Balm for each ill.
Look on sweet nature's breast,
Let the meek heart find rest,
Deep, deep and still!
Murmur glad waters by !
Faint gales with happy sigh Come wandering o'er That green and mossy bed, Where on a gentle head, Storms beat no more!
What though for her in vain Falls now the bright spring rain, Plays the soft wind ?
Yet still from where she lies Should blessed breathings rise, Gracious and kind.

Therefore let song and dew
Thence in the heart renew
Life's vernal glow!
And o'er that holy earth
Scents of the violet's birth, Still come and go.
Oh! then where wild flowers wave,
Make ye her mossy grave, In the free air!
Where shower and singing bird 'Midst the young leaves are heard-There-lay her there!

WHATIS WOMAN.
What is woman? Man's sweet angel ? Gentle, tender, calm, and kindEver loving, ever faithful, Is her soft and soothing mind; A beauteons flower, born to blossom, Giving gladness to the eye: Half designed for man's fond bosom, Half a creature of the sky!
What is woman? Ask her sorrow, Know how deeply she can feel; But when hope her heart will borrow, Mark what joy she can reveal;
O'er her cheek each pure emotion Of her soul is seen to fly,
As fair clouds with chaste devotion Fleet o'er Luna's face on high.
Thus she is a flower's sweet blossom, Giving gladness to the eye; Half desighed for man's fond bosom, Half a creature of the sky! AUTUMN.
The Summer days have vanished, Like a dream at break of day; The sweet, fair flowers are banished, That used to deck our way.
But the grapes, in many a cluster, Hang purple from the bough;
And the Heavensglow with lustre"Tis glorious Autumn now ?


This machine is the invention of Mr. Kas. There is a small shaft under the bed of E, simir Vogel, late of Lowell, Mass, , and secured to him by letters patent last year, which patent is now held jointly with him by Mr . Thomas of Saccarappa, Maine. This machine was exhibited at the Fair and was pronounced to be the most ingenious new Machine exhibited. It will be perceived that this machine is not the result of a sudden glance of genius, but the produce of a great range of original thought and correct mechanical arrangement.
The object of the machine is to make weaver's heddles from the thread, casting the loop by braiding instead of knotting, and performing triple the amount of work and better than can now be done by hand.A patent is also secured for the peculiar eye of the heddle, so that both machine and its results are protected.
Description.-Fig. 1 , is a perspective view and shows gangs of different heddles winding on the beams. A A, is the iron framing. $B$, are the driving and slack puileys. $C$, is the lever to gear and ungear. E E, are the bobbins with the thread to make the heddles.-which by small cog wheels on the same operate and revolve the bobbins by gearing into F. I I, are the heddles after the eye is formed winding up on the beams $L \mathrm{~L}$. The gang of wheels at the left are for the purpose of connecting the shafts of the beams to be driven by the main shaft below. The number of eyes to the foot in the heddles can be increased or diminished by the gearing of these small wheels $K$, is a small bearing for the shaft of $L$, and $J$ is the shaft with a screw cut on part of it. This is for winding the heddle gradually along the beam, and as $K$ is a grooved and wormed faced pulley driven slowly by the small gang of wheels at the right, the shaft J, is wormed slowly through rts bearings carrying the beam to let the heddles wind one after another on the same. The heddles are formed of a double cord which is twisted by the bobbins revolving and the eyes or loops are formed by the bobbins being interlocked, braiding the two strands at the two points which form the eye of the heddles.The section views will explain the operations better in detail.
FIGURE 2.


As the same letters indicate like parts on Fig. 5 is a view of the underside of the "ma all the following engraving, we shall describe chine, showing the gearing by which the ta Fig. 3 is a top view. Fig. 2 is a side elevation. bles that carry the spindles are made to reand spindles, and fig. 4 is an end elevation.
(For Figs. 3, 4 and 5, see page 44.

## RAIL ROAD NE WS.

Erie Rall Road to this City.
The Paterson and Ramapo Railroad is fin, ished and a communication is opened up with this city and the Erie Rail Road via Paterson, N. J. This is a branch road and laid with the heaviest H rail and cost only about $\$ 21$,000 per mile total $\$ 350,000$. The first train passed over the road on Wednesday last, and every thing was in perfect order. Their four new cars made by the Springfield (Mass.) Company, and the locomotives New York and Ramapo, built by Ketchum, Rogers \& Governeur, Patterson, N. J. were tried and worked to admiration. The ladies' car is provided with mirrors, dressing room, \&c. One of the locomotives traversed a portion of the road-with tender, baggage car and three passenger cars attached, -at the rate of fortyone miles an hour !

## Syracuse and Oswego Railroad.

Twenty-four miles of this road are now ready for use, and regular trains will run to Fulton on and after Monday next. The estimated cost of the entire road, 35 miles, with a rail weighing 57 lbs . to the yard, the Syracuse Star says, will be about $\$ 400,000$, and the maximum grade not to exceed twenty feet to the mile. John Lathrop, Esq., is the Chief Engineer.

Costly Railroad Bridge.
The bridge across the Richelieu River, near Montreal, on the line of the Atlantic and St . Lawrence Railroad, is represented in the Montreal papers to be one of the most solid and substantial on this side of the Atlantic. It is over eleven hundred feet long, and it is at an elevation of fifty feet from the water. Its cost is stated to be about $\$ 110,000$. The Montreal Gazette states that the President of the Atlantic and St. Lawrence Railroad, accompanied by the engineers and a party of gentlemen, lately examined the work upon the road as tar as St. Hyacinth, thirty miles trom Montreal to which spot, it is thought the cars can un by the first of next month. Nine miles are already in running order.

Great Speed of a Locomotive.
Recently in England, on the Great Western Railroad, seventy-seven miles were passed overby an express train in seventy-eight minutes twenty-nine seconds, including stoppage of five minutes thirty-fiveseconds. Fifty three miles of the journey were performed in forty-nine minutes thirteen seconds. The speed in some cases was kept up at seventy, seventy-two and seventy-seven miles an hour. This rate of speed was attained, it will be observed on a broad guage track seven feet wide, and with engines having driving wheels eight feet in diameter
The Erie Railroad must show some point of superiority to convince the public of the benefit of the broad guage here.

> Locomotive Speed.

The Lowell Courier says that a new engine called the Camilla, built by Hinkley \& Drury, and designed for speed, on the Boston and Lowell Railroad, has driving wheels of $6 \frac{1}{2}$ feet diameter, and is capable of running a mile in a minute.
Forty miles of the New York and Erie Railroad, south and east from Dunkirk, are graded and ready for the superstructure. On the 12 miles formerly laid down and completed the iron has been taken up as well as the timber sills, and housed for preservation.

As soon as the new railroad is finished from New York to New Haven, it is said that the whole distance from Boston will be accomplished in the short space of eight hours.
The officers of the Customs in England retained Iridium ore imported in a French vessel, and rated the duty as an extract, at 5 s . per lb .

