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Acrostic.
Science, yes science, what pleasures untold C oncentrate to hallow the glorious word:
In courts of proud kings, round mountains of gold,
$E$ ven down the damp mines, or where'er it is heard,
N one shall turn away deaf, but all echo the same,
T ill Sol shall grow old and the Earth become lame.
In mind of the school boy it soon shall find room,
F ire up with new zeal his bold search for the truth,
I nvest with new beauties the anvil and loom, C orrect the gross errors and foibles of youth.

A rt, handmaid of science can with her be found
$M$ eting out in full numbers whate'er she decrees;
E nslaving broad rivers; tearing up the hard ground ;
R ushing through the dark tunnel; defying rough seas ;
I mpatient of steam flitting mountain and vale,
C alls down the swift lightning to leap the long wire;
A nd restless the moment a triumph grows stale
N o limits will give to her faith or desire. Bridgewater, May, 1849. O. A. J. THE OLD MAN'S REVERIE. Scoth'd by the self-same ditty, see The infant and the sire;
That smiling on the nurse's knee, Thus weeping by the fire; Where, unobserved, he finds a joy To list its plantive tone, And silently his thoughts employ On serrows all his own. At once it comes, by memory's power, The loved habitual theme, Reservid for twilight's darkling hour, A veluntary dream;
And as, with thoughts of former years, His dimain: eves u'erflow,
None wonder at an old man's tears Oi seek his grief to know
Think not he dotes, because he weeps: Conclusion ah how wrong! Reason with Grief joint empire keeps, Luaissalumy streas;
And oft ia ege a helylese pride With jealuus weakness pines,
To second infancy allied, And every wo reínes. He ponders on his boyish years, When first his race began, And oh, how wonderful appears The destiny of man!
How switt those gladsome hours were past, In darkness closed how soon!
As if a winter's night o'ercast The brightest summer's noon. His withered hand he lifts to view With nerves once firmly strung, And scarcely can believe it true That ever he was young, And as he thinks o'er all his ills, Disease, neglect, and scorn, Strange pity of himself he feels, Thus aged and forlorn.

FEATHER BUCKET WATER WHEEL.---Figure 1.


This wheel is the invention of Mr. A. P. Conant of Fitchburg, Mass., which we notjced in No. 36, page 284. It embraces some novel features which will be more clearly understood by reference to the accompanying engravings. Fig. 1 is a perspective view, and fig. 2 a view of the interior. The same letters indicate like parts. A, are the sides of the wheel. They are cast in one piece along with the bottom, or they may be made separate, but bolted together water tight. $G$, is a disk or circular plate which fits snugly into the sides A , and forms a water tight chamber $B$, between it and the bottom of the wheel,
and it also forms a water tight chamber be tween it and the top plate or cover of the wheel, which is left off in the engraving, for clearer explanation. $\mathbf{C}$, is the main shaft secured to the convex hab H , to which the disc G, is firmly united. By moving the dise therefore, the hub and the shaft C , receive motion. The sides, top and bottom are stationary. The way in which the shaft is revolved is as follows : D E, are two arms or blades which are secured to an axle passing through the hub $H$, of the main shaft. These blades are made to feather or change positions at right angles with the disc G, at certain points
Figure 2.

and then resume a position on the same plate with the disc and forming part of it when passing from the point where the water is discharged to the point where the water is led to act for propulsion on the wheel. The way in which this is accomplished is by a stationary cam L, fig. 2, which has an incline on each side and which, as the blades revolve operate the cams K J, on the axle of the blades, to turn or feather as it is called, the blades as represented in fig. 2. The inner ends of the blades are convex, and they fit to move tight in the water chambers of the the wheel. F , is the stationary water divisi-
n. It has a slit cut through it to allow the disc $G$, to pass freely without any back resis tance of the water. The blade D , lies on the same plane with the disc when passing through the opening in $F$.
If the water was admitted into the chambers B, at G, fig. 1 , and allowed to pass freely round, and then discharged at $B$, on the left side of $F$, fig. 1, no motion whatever could be communicated to the shaft $C$. But if the water chambers are filled up with a resisting medium attached to the shaft, the water will act on that resisting medium to propel the shaft to which the said resisting medıum is attach.
ed. This is one principle of the wheel, but it has another, viz: to present this resisting medium to the force of the water until the disc G, has nearly completed a revolution, when the resisting medium is removel and the water allowed to escape as represented.

## RALLROAD NEWS.

## Hadson River Raliroad.

The Hudson River Company has made a contract in England for wrought iron wheels for their cars, which will enable them to pass over the route at English speed-about fifty to sixty miles an hour. The road is expected to be open some time during the month of July along part of the route.

New England Accumulations.
The Boston Atlas states the whole cost of Massachussetts railroads, thus far, at about $\$ 47,000,000$. . Host of this has been expended within the last fifteen years, and probably three-fourths of the amount has been furnished by Boston. Where did the money come from? There are no gold or silver mines in the Bay State. England and Pennsylvania furnished the iron for these roads, and, for aught that appears, have been fully paid.

## Pennsyivania and Ohio Raliroad Com-

 pany.The Treasurer of this Company gives notice through the Pittsburg papers that an instalment of $\$ .5$ per share will be required from subscribers hy the 15 th of July next.The contracts for the first 20 miles of the road are to be given out on the 30th proximo.
At the present moment the Railroad between Cincinnatti and Cleaveland on Lake Erie is being puished forward with considerable energy, and in view of the suspension of Lake Erie navigation during the winter season, the people of Buffalo think that a Railroad between the two places will soon be an imperative necessity. The project is now before the people of that City, and it is hoped that a Company will soon be organized to construct the road.

The Ballston Rallrcad Disaster.
John Tallmadge, a farmer residing in the immediate vicinity of the railroad disaster, was arrested on Friday the 25th ultimo, on complaint of L. R. Sargent, Esq., Superintendent of the Renssalaer Railroad Company, tor willfully and maliciously placing stones upon the track of said Railroad on the morning of the 24th inst, by which the locomotive, tender ana baggage car were thrown from the track, and literally crushed to pieces; and seriously injuring the engineer Mr. Dodge, and Mr. Cronk, the fireman. The facts brought out on the examination of the prisoner were overwhelming against him.He was held to bail in the sum of $\$ 3000$ - to appear at the next Oyer and Terminer, which sits in August next. The persons injured are yet alive, but in a very critical condition. The Physicians think they may possibly recover.

## A Southern Factory.

The Mississippi Manufacturing Company at Draine's Mills, Chuctaw county, is now in successful operation yielding a large dividend. It has now 500 spindles in operation, which consumes daily 300 pounds of Cotton, and turn out 280 pounds of spun thread. The cost of the cotton consumed every day is $\$ 15$, other expenses 10 ; making in all $\$ 25$ The manufactured article sells readily at 20 cents, making the whole product of the spindles $\$ 56$ per day.
The great ceiling of St. George's $\mathrm{Hall}, \mathrm{Li}-$ verpool, is just finished.' Its span is seventy ive feet. The arch is turned with hollow tiles, which weigh six hundred tons, one thousand four hundred tons less than if it had been constructed of brick.

