

Major Brown, our countryman, the consulting railroad engineer of the Emperor of Russia, states in a letter, that the Emperor has determined, as soon as the season will allow, to commence the projected railroad from St. Petersburgh to Warsaw, the surveys for which were made last year. Major Brown will, by his position, have the chief superintendence. The distance in this instance to run is from 750 to 800 of our miles, and stretching, for the most part, through an inhospitable tract of country, intersected by many rivers, broad norasses' and lowlands. The railroad will h

from end to end in a straight line, is about boiler." 6 feet 9 inches on the inner edge. There is an Westfield, Mass. elevation from the straight line on both edges,

[In answer to a correspondent, last week, we stated that we would give an abstract of thus giving the blade a slightly twisted form as represented by the edge view, E a b. Each Dr. Haycraft's experiments with stame (he blade is secured at its end, a, close to the inproving it to be anhydrous steam) this week, but owing to the number of other articles ner face of the radial arms, A A, of one of the outside sets; and at its opposite end, b, close which are somewhat long, and which we could

revolutions per minute. I have since run a

one horse-power with stame, and found it to

he a great saving of fuel. I heat my steam

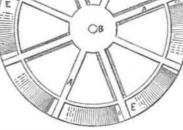
in a cylinder at or near the back end of the

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begun in the latter part of May, and its completion will quicken into activity the internal commerce of Northern Europe.

The railroad from St. Petersburgh to Mos cow, of which our talented countryman, Major Whistler, was Chief Engineer when he died. is now nearly finished. It is 421 miles long

Length of American Railroads. It is calculated that at the end of 1851. there will be 10,600 miles of railroads in opera tion in our country; and with those which have already been contracted for, there will be 2.000 miles more constructed in 1852. No country in the world can equal ours for the number of railroads.



a space between them, each paddle of one set

is placed opposite to its fellow on the other

set, each pair forming a figure of a semi-elipti-

cal form, with an opening at its vertex. The

FIG. 2.

wheel has four sets of radial arms, A A A A. They are seccured in bosses made fast upon the shaft, B, and bound together by bolts to the rings, CCC C. The paddles or buckets,

to the front edge of one of the arms, A' A', of not avoid inserting this week, we defer the the corresponding inside sets, at a distance remarks spoken of for a week longer. behind that to which the end, a, is secured. Artesian Wells. It is proposed by the citizens of Montgome-Each pair of blades resembles a single bucket with an opening between them. These buckry, Alabama, to supply that city with pure etsenter the water edgewise in such a manwater by boring one or more artesian wells on ner as not to displace it until the bucket ar-Capital hill. In connection with the project, rives at a proper position to exert its propelit is stated that a plan or machine for boring ling power. The buckets being set opposite artesian wells has been invented by Dr. C. A. Woodruff, which will effect a great economy of to one another have a tendency to throw the

water towards one another, thereby gatime and labor in such excavations. It is the thering the water in such a manner as to enopinion of Dr. W. that, with the apparatus able the blades to exert their leverage furnished by him, almost any quantity of on a firmer fulcrum, if we may be allowed to water can be had on Capital Hill at a depth E E, are made of plates of metal, each in use such an expression. The oblique position of five or six hundred feet, for the very small the form of the section of a flat ring, the cir- of the blades with the opening between them, expense of three hundred dollars.

inches, at 3 feet seven and a quarter inches,

at four feet it is eleven inches; at five feet it

is six inches, at six feet four and a half inches.

and at seven feet two inches. Their length