common carriages, moving with
y, and is in every respect as ma-
those drawn by horses, its velo-
creased or lessened at pleasure by
ion of the five following powers
may require. The first power,
e greatest, is the weight of the
age with whatever is contained
ch is raised up by the oval wheels
ound, and when descending acts
est lever. 2d Power is the weight
ame which supports the carriage
s contents, which being likewise
y the said oval wheels at the same
t time acts in descending on the
e levers and is the next greatest
Power is the carriage body which
on 4 friction rollers vibrates as a
cting on the two longest levers.
weight of the person who regu-
tion acting likewise on the ends
long levers and is the first mo-
iage receives. 5th. Is an occasi-
which is gained when descending
nding up two springs placed un-
iage which also acts with great
ends of the aforesaid two long
rising a hill.

JNO. J. STAPLES, JR.
—SAM'L. FOLWELL,
GEO. TAYLOR.

NTIFIC MEMORANDA.

India Rubber.

a Rubber Factory at Harlem, this
ing daily about 700 pounds of india
gs for railroad cars. In combina-
e india rubber a portion of white
d is used which must make a su-
position, to what is called curing,
canized india rubber is simply sul-
ned with the india rubber at a
rature. Sulphurous gasses we be-
rs nearly the same purpose. Gutta
lcanized by the same process.

Electric Light Again.

oreign papers we learn that expe-
e been made in France for throw-
ic light upon the railroad in front
The experiments have been par-
sful.

The Bosphorus.

e late extensive observations of
re de Heil, it appears that there
iable difference of level between
ea and the Sea of Marmora; and
y there is no real current flowing
lack Sea through the Bosphorus.
es all apparent currents to the
h being mostly from the North,
nerally a flow from the South.
pensated for by the strong currents
the North during the Southerly

In Locomotive Fuel Wanted.

n stated that the Reading Railroad
ng the year 1847 consumed by its
90,746 cords of wood. The con-
wood on all our railroads is enor-
ust soon thin our country, woody
, of its vast primeval forests. Hi-
motion, by shaking the coals into
, has prevented the use of coal.
hey not use coke made of bitumi-
No wood is used on the English

Emery in Asia Minor.

atcheff, in his recent explorations
nor, says Silliman's Journal, has
light extensive beds of Emery in
portions of this country, particu-
en the ruins of Stratonicea in Caria
. This substance is indispensible
; minerals and all hard stones, as
he lapidary's use generally, and by
discoveries, it is evident the ne-
ly will suffer no diminution.

ght of the Atmosphere.

W. Lubbock, according to the hy-
opted by him in his Treatise on
ors, shows the density and tempe-
given height above the earth's
ccording to the hypothesis, at a
teen miles the temperature is 240°
zero; the density is .03573; and
ere ceases altogether at a height
les. M. Biot has verified a calcu-
mbert, who found, from the phe-
wilight, the altitude of the atmos-
about eighteen miles. The con-
dition of the higher regions of the atmosphere, according to the hypothesis adopted by Ivory, is very different, and extends to a much greater height.

The Sufferings, Perseverance, and Triumph of Genius.

There is at present in England an American who went to that country to endeavor to interest the capitalists in a new bridge which he has constructed. His name is Remington, a native of Virginia. An account of his progress is given by himself in a letter to Dixon H. Lewis, and published in Hunt's Merchant's Magazine. When he arrived in England in January 1847, he was without money, and spent the first five months vainly looking for somebody with enterprise enough to encourage his plan, living all the time on less than three pence per day. He slept upon straw, for which he paid a half penny per night. His limbs became distorted with rheumatism, and he was literally covered with rags and vermin, consorting as he had to do, with the lowest beggars in London. Still he did not despair. His sufferings were so great that his head turned grey. He had to pay to usurers £10 for admittance to the Royal Zoological Gardens, where he succeeded, after mueh mortification in getting a model made of the bridge. The model although a bad one astonished every body. Every engineer of celebrity in London was called in to decide whether it was practicable to throw it across the lake. Four or five of them at the final decision declared that the model before them was passing strange, but that it could not be carried to a much greater length than the length of the model. This was the point of life or death with the inventor. He says; —

"I was standing amidst men of the supposed greatest talent as civil engineers that the world could produce, and the point decided against me. This one time alone were my whole energies ever aroused. I never talked before —I was haggard and faint for want of food— my spirit sunk in sorrow in view of my mournful prospects—clothes I had none—yet, standing over this model did I battle with those men. Every word I uttered came from my inmost soul and was big with truth—every argument carried conviction. The effect on these men was like magic—indeed, they must have been devils not to have believed under the circumstances. I succeeded. My agreement with the proprietor was that I should superintend the construction of the bridge without any pay whatever, but during the time of the building I might sleep in the Gardens, and if the bridge should succeed, it should be called 'Remington's Bridge.' I lodged in an old lion's cage not strong enough for a lion, but by putting some straw on the floor, held me very well, and indeed was a greater luxury than I had for many months. The carpenters that worked on the bridge sometimes gave me part of their dinner. On this I lived and was comparatively happy. It was a little novel however, to see a man in rags directing gentlemanly looking head carpenters. The bridge triumphed, and it cost £8, and was the greatest hit ever made in London. The money made by it was astonishingly great, thousands and tens of thousands crossing it paying toll, besides being the great attraction to the Gardens. Not a publication in London but what has written largely upon it, although I have never received a penny nor ever will for building the bridge.

The success of his invention gave him, however, celebrity, and he says it also gave him credit with a tailor.

I got a suit of clothes and some shirts—a clean shirt. Any shirt was great, but a clean shirt—O God, what a luxury! Thousands of cards were left for me at the Gardens, and men came to the bridge from all parts of the kingdom. I first built the mill, which is the most popular patent ever taken in England. The coffee pot and many other small patents take exceedingly well. The drainage of Tixall Meadows is the greatest triumph I have yet had in England. The carriage bridge for Earl Talbot is a most majestic and wonderfully beautiful thing. Dukes, marquisses, earls, lords, &c., and their ladies are coming to see it from all parts. I have now more orders for bridges from the aristocracy than I can execute in ten years, if I would do them. Indeed, I have been so much among the aristocracy of late that what with high living, being so sudden a transition from starving, I have been compelled to go through a course of medicine and am just now convalescent. Of course anything once built precludes the possibility of taking a patent in England, but its merits and value are beyond all calculation. A permanent, beautiful and steady bridge may be thrown across a river half a mile wide out of the reach of floods, and without anything touching the water, at a most inconsiderable expense. The American patent is well secured at home I know. I shall continue to build a few more bridges of larger and larger spans and one of them a railroad bridge, in order that I may perfect myself in them so as to commence fair when I reach America. I have a great many more accounts of my exploits since I came to Stafford, but must defer sending them until next time. I beg you will write me, for now, since a correspondence is opened, I shall be able to tell you something about England. I know it well. I have dined with earls, and from that down—down—down to where the knives, forks and plates are chained to the table for fear they should be stolen."

Jeffery the able Editor of the Edinburg Review once said. Offer a prize of a thousand pounds for the best Essay on Greek and ten chances to one if a yankee dont win it, and some fellow who could not read a word of it before he saw the offer of the prize. The case of Mr. Remington exhibits a heroism of a far more elevated and ennobling character than the triumph of valor on the battle field.

Respect for Art.

A nobleman having called on Holbein while he was engaged in drawing a figure from life, was told that he could not see him but must call another day. Foolishly taking this answer as an affront, he very rudely rushed up stairs to the painter's studio. Hearing a noise Holbein opened his door; feeling enraged at his lordship's assumption and intrusion he pushed him backwards from the top of the stairs to the bottom. However, reflecting immediately on what he had done he repaired to the king. The nobleman, who pretended to be very much hurt, was there soon after him and having stated his complaint, would be satisfied with nothing less than the artist's life: upon which the king firmly replied— 'My lord, you have not now to do with Holbein, but with me; whatever punishment you may contrive by way of revenge against him shall assuredly be inflicted upon yourself.— Remember, pray, my lord, that I can, whenever I please, make seven lords of seven ploughmen, but I cannot make one Holbein of even seven lords.'

The African Rhinoceros.

The Black Rhinoceros, whose domains we seem now to have invaded, resembles in general appearance an immense hog; 12½ feet long, 6½ feet high, girth eight feet and a half, and of the weight of half a dozen bullocks; its body smooth, and there is no hair seen except at the tips of the ears and the extremity of the tail. The horns of concreted hair, the foremost curved like a sabre, and the second resembling a flattened cone, stand on the nose and above the eyes; in the young animals the foremost horn is the longest, whilst in the old ones they are of an equal length, namely, a foot and a half or more; though the older the rhinoceros the shorter are its horns, as they wear them by sharpening them against the trees, and by rooting up the ground with them when in a passion.

When the rhinoceros is quietly pursuing his way in glades of Mimosa bushes, (which his hooked upper lip enables him readily to seize, and his powerful grinders to masticate,) his horns, fixed loosely in his skin make a clapping noise by striking one against the other, but on the approach of danger, if his quick ear or keen scent make him aware of the vicinity of a hunter, the head is quickly raised, and the horns stand stiff and ready for combat on his terrible front. The rhinoceros is often accompanied by a sentinel to give him warning, a beautiful green backed, and blue winged bird, about the size of a jay, which sits on one of its horns.