FORTUNES AND MISFORTUNES OF AN ARTIST.

Many of our readers in Washington, Baltimore, New York and Philadelphia, remember the famous Root daguerrean gallery, on Chestnut street, in the lastnamed city, which flourished most about the year 1850, when the art was comparatively in its infancy. Since that period the art has yearly improved, and many hundreds who once admired the sun pictures so skillfully taken at the Root gallery have departed this life, while as many others now living have, no doubt, forgotton the pleasant, kind-hearted gentleman who was ever in attendance at the gallery, ready with his pleasant countenance to greet a new customer. That gentleman was M. A. Root, the proprietor of the art gallery, and after whose name it was then called and so credibly known. A few years ago we lost sight of the famous operator in Chestnut street, and, until the other day, we knew not what had become of him, but supposed that, like others in the profession, he had amassed a fortune and had retired from business, to enjoy the fruits of his industry, when, one day, we came across a neatly-printed circular, from which we extract the following :-

extract the following :--M. A. Root would respectfully inform his friends, his former patrons and the public at large, that after nearly five years' suspension of his professional abors he has re-turned to the practice of Heliography in all its branches, and may be found at No. 953 Broadway, and No. 183 Fifth Avenue, opposite Fifth Avenue Hotel, New York, pre-pared to execute pictures in every mode and style of the art, and with all the latest improvements. Many may be aware that this long inaction was caused by a terrific rail road collision, from which escaping barely with his life, he received injuries so severe that indescribable and pro-tracted sufferings were the result, and he must carry tokens of them even to his grave. His health and strength, however, being at last restored to a degree fully adequate to all the demands of his profession, he now returns to the practice of an art which, for twelve years prior to his cas-uality, he had cultivated with enthusiastic zeal. We afterward called at the gallery, between Twen-

We afterward odled at the gallery, between Twenty-second and Twenty-third streets, and solicited from Mr. Root an account of his early life, and a statement concerning the casuality to which his advertisement briefly alludes. He being one of the oldest, and at one time the most popular operator in the country, we think the following short history of his life, successfulcareer and misfortune will not fail to interest all his old personal friends, as well as the profession tude and dexterity, and not artistic genius and acto which he belongs.

M. A. Root was born in Granville, Licking County, Ohio, August 15, 1808. His parents emigrated to that place, then an untracked forest, from Westfield, Mass., in 1807. The subject of this sketch who was by temperament, industrious, sober and regular, remained at the parental home until his twentieth year, taking his full share of the severe toils of this wilderness farm. But, notwithstanding his incessant and fatiguing labors, and the absence of all appliances and incitements to the culture of art, the native means of attracting the popular attention to his art. genius of the boy manifested itself, as has happened thousands of times before, by a propensity to sketch the faces of persons, animals or objects coming in his way.

Thus passed the life of young Root until 1827, when his father sent him to the Ohio University, in Athens, Ohio. He entered the University, and committed the were generally noticed editorially by the city press, mistake so common with ambitious youths; he and often by distant papers, besides being liberally studied intensely, while he omitted to take a moderate share of physical exercise at regularly-recurring periods, substituting for this violent fits of exercise at remote intervals. As a consequence his health became undermined, and he was obliged to leave the school. So soon, however, as he was able, he took to his favorite employment, and, with his pencil, sketched first the faces of his father's family. His success encouraged him to hope that he saw an opening for the future. Opportunity occurred for taking portraits in Root was to exhibit skillfully prepared pictures at the adjoining towns. Becoming thus favorably known, he visited Columbus, the State capital, and there passed the winter of 1830-31, employed in sketching and several diplomas were awarded him for the superithe members of the Legislature, and citizens of the ority of his heliographic specimens. place.

Finding, while resident here, a writing master of celebrity, he took evening lectures of him in addition to his sketching occupations by day. The result of this two-fold work was a second attack of pleuresy, which came upon him while stopping in Worthington a few miles from Columbus. There he was confined from February to September before he could return to his father's house, twenty eight miles distant. After his recovery he resumed his pencil, and, at the same time, intelligent and genial expression of the sitter's inditaught writing schools in the evenings; and, after a viduality or self-hood.

while, added to these two employments a third, that of copying engravings with the pen, a work which he executed with extraordinary skill. The dexterity and taste displayed in these various arts, gained for him an extended and enviable reputation, especially as he had been from the outset entirely self-taught, and ossessed of few advantages. He was, in consequence, strongly advised to visit New York or Philadelphia, and place himself under the instruction of Inman or Sully. Accordingly he came, in August, 1833, to Philadelphia, and consulted Mr. Sully, who spoke discouragingly of painting as a profession, suggesting that all artists were poor, and that, if he became one, he would inevitably be doomed to much suffering in his art, which were published in the Photographic Jourmind, body and estate. He then counselled Mr. Root to make the teaching of penmanship his vocation, stating that he could do more good and secure more thanks, as well as more dollars for his labors.

Such suggestions from so high authority weighed upon the young man's mind so forcibly as to alter, at least for the time, his plan of life. Accordingly, by the solicitation of friends, he was induced to commence teaching penmanship in Wilmington, Chester, Woodbury and other places in Pennsylvania, up to the year 1835, when he commenced private classes in Philadelphia, and assumed the charge of the writing department in several of the city schools. He continued thus occupied until 1846, and, meanwhile, prepared and published an admirable series of writing books, which had an extended sale.

In 1846 circumstances served to awaken, in a novel form, his old love of art. A daguerrean gallery, at the corner of Fifth and Chestnut streets, in Philadelphia being for sale he purchased it of J. E. Mayall, the now-celebrated photographer to the Royal Family, London, and there commenced the business of sun painting. At that time there were but five practitioners of the art in the city, and daguerreotyping was regarded by the public generally not so much as an important art, destined to become general, as an ingenious and beautiful novelty. And even by its practitioners, not less than by the public, it was esteemed little else than a mere mechanical operation, requiring simply a manual aptiquirement. The fallacy and gross wrongfulness of these views Mr. Root directed his efforts to expel, and succeeded in making his new vocation respectable, popular and remunerative, and to give it an approved place and name throughout the country, at the same time that he carried the art itself to the highest attainable point of perfection. In these endeavors he spared no needful expense, and in the course of a few years devoted to building up his business upward of \$25,000. He availed himself of every practicable Thus he took careful views of public edifices, public processions and demonstrations, &c., and embraced every opportunity accorded him for obtaining the portraits of distinguished individuals, such as statesmen, military men, clergymen, lawyers, artists, actors, scientific and literary persons, &c. These productions advertised by himself at a heavy expense. The design of all these measures was to popularize the art by drawing general attention to its productions. The result of this course of Mr. Root was to augment very soon the number of city practitioners from five to above one hundred. As an indirect effect of the same causes the daguerrean operations in the United States swelled from a few hundreds to the number of ten thousand. Another of the plans resorted to by Mr. annual Fairs held in New York, Boston, Philadelphia and elsewhere. At these exhibitions eighteen medals

Mr. Root's natural love for the art and his enthusiastic and protracted study of publications upon the subject, had thoroughly acquainted him with the characteristics most important to a portrait and the most essential points to be aimed at in attempting the representation of his subject ; e. g., the best view of the face and the best posture of the person ; the disposition of light and shade calculated to produce roundness and relief; and more especially the most

It has already been mentioned that he was ever occupied with endeavors to improve the art. These endeavors embraced his individual experiments and his interest in and aid to the experiments of others. Thus, in regard to the supposed discovery of a method of daguerreotyping in the colors of nature, or chromatography, he exhibited his habitual interest in the subject by an expenditure of time and labor in the encouragement of the project, for which he was never pecuniarily remunerated. So also to perfecting and popularizing the photograph and ambrotype he devoted much time, great toil and large outlays of money. He furnished more articles upon nal. than any other American.

We have thus intimated, in a summary way, the nature, variety and magnitude of Mr. Root's exertions in behalf of the heliographic art in its several species. From this account it appears that from very childhood his life had been more or less given to art in general, till a concurrence of circumstances in 1846 having directed his attention to heliography, the twelve following years were given to this with a zeal and a success to which this country probably furnishes no parallel. The advance of the art rather than its pecuniary results had been his paramount object during this period. The time, however, had come for seeking some pecuniary compensation for what he had done and expended in this art. At the close of the year 1856 he sold out his establishment in Philadelphia, and commenced fitting up another establishment in New York, under auspices which could hardly have failed to achieve him a successful business. A few days prior to the time appointed for commencing his new enterprise he set out for a short visit to Ohio. While on his journey he became the victim of a railroad collision, from which he now suffers and which has rendered him a cripple for life. Nine persons were rent into fragments and seventeen were more or less severely wounded, and a friend with whom Mr. Root was conversing at the moment was instantly killed. After all the dead and injured within view had been removed, some motion was noticed in a mass of rubbish lying near, chiefly of splintered boards and timbers; for in the collision the reception room of the station house in which these friends were waiting for the train, was utterly demolished. This pile being removed, Mr. Root was found beneath it most frightfully mutilated, lying upon his left leg with his foot by the side of his face. He was removed to a settee, but his case being considered so hopeless that all the other wounded were attended to before his injuries were specially examined. This was twenty-four hours after the collision, during all which time he had lain unconscious, and it was the agony of the surgical ministrations that restored his senses. For upwards of four months he was unable to move a limb; the bone of one leg being crushed from hip to knee, and there were other injuries scarcely less severe. To the physical agonies of these long, long months must be added the mental distresses arising from Ins absence from his family and the thought that his new business plans were being thwarted. At last he was able to reach his home, but for several months he was too feeble even to take a short ride, and it was still longer before he could walk the distance of a square without the assistance of two crutches.

Meanwhile, through the long painful hours of the day, and the still more painful hours of the night, his mind was tortured by thoughts that would intrude on all he had lost and was daily losing; by doubts whether he would ever regain health and vigor to resume the business of life, and by the soon-discovered certainty that, if he recovered, he must be a life-long cripple.

A loss of five years' probable profit by the practice of a first-class heliographer, added to the expense attending such a long sickness, and the reader can readily conceive that Mr. Root's pecuniary loss from his calamity must be very large. No compensation can be made him for the years of suffering he has endured. But compensation for pecuniary losses is pos sible, and we trust residents of this city and other places, who have occasion to patronize a skillful photographic artist, will not fail to give the unfortunate subject of our sketch their patronage. Mr. Root may be found in constant attendance at his new gallery, No. 953 Broadway, New York city.

Improved Knife Sharpener and Scourer.

The accompaning engraving represents a useful kitchen implement, which will be found of daily convenience in every well regulated household. It is an instrument for sharpening knives, and for scouring knives, forksand spoons, and is operated as follows:-

By the thumb-screw, A, it is readily attached to

the edge of a table when the several parts will all be found in a convenient position for use. The knife is sharpened by drawing its edge between the two hardened steel disks, B B. Two flat pieces of cork, e and d, are pressed together by a spring placed behind the piece, d, and the blade o the knife by is polished passing it back and forth between these pieces; dry emery or rotten stone being dusted upon them. The cylindrical cork, E, with the plane end is for the flat portions of forks and spoons, and the rounded end of the cork, F, is for the bowls of spoons, while the tincs of forks are secured by being rubbed between the two corks, E and F. The cork, G, presents a surface of a different form still for other utensils. The box, H, is

for the scouring powder BUCKMAN'S KNIFE SHARPENER AND SCUUKEK. and produce stores, and produce store sto faces to fit all parts of the several utensils to be tance apart at the opposite end is adjusted by a right

Application for a patent for this invention has been made through the Scientific American Patent Agency, and further information in 'relation to it may be obtained by addressing the inventors, E. and A. Buckman, at East Greenwich, N. Y.

Improved Wrench and Sawset. The invention here illustrated is pretty certain to prove a profitable one, from the combination of two implements into one which. when upon an article of general use, always insures success; first, it is a good thing ; and secondly, it is being well managed. It is a convenient, simple and cheap wrench, such as is wanted by every blacksmith and carpenter and nearly every farmer in the country; and Mr. Clizbe, who has taken an interest in the invention, is a man of indefatigable energy and perseverance, who could make an inferior invention profitable. The first money that he sent to Washington was misappropriated by his agent, and Mr. Clizbe, after waiting nine months, visited Washington and found that no step had been taken to secure his patent. In the meantime a rival application had been made, between which and the subject of this patent an interference was declared. Mr.

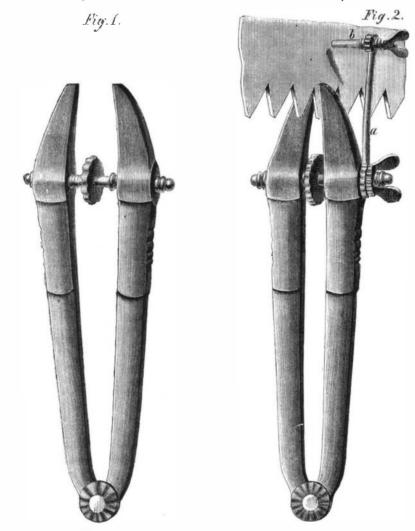
it up, persevering after repeated rejections, till he finally obtained a patent covering all the points he desired

tical blacksmith, for the purpose of turning nuts on plows, which he found it difficult to turn by means of a monkey wrench; and it will be found serviceable in many places where no other style of wrench can be employed.

It is so simple and so clearly represented in Fig. 1

CI

The introduction of petroleum, kerosine, photogene, or rock and well oil, is making tremendous scoured, and the cheapness at which it, can be made. and left hand screw passing through them in their strides, though it does not surpass the prediction in



RAWSON'S PATENT WRENCH AND SAWSET.

Clizbe's application was rejected, but he followed widest part. It will be seen that this form of con- of what we want; American hostilities and the struction gives 'remarkable strength to the wrench; ice in the St. Lawrence (although we have still St. the screw braces the two jaws where the greatest strain John's, New Brunswick, may stop supplies to some comes, while the handle ends, being joined together extent, but I have no doubt the future will vindicate This wrench was invented by Ruel Rawson, a prac- by the hinge, combine the strength of both. It is the expectations I have so frequently expressed.

impossible for the united strength of two men to bend or break one of these wrenches of moderate size. Fig. 2 represents the wrench with a gage attached

to form a saw-set. Upon one end of the wrench so ew is secured by a nut the rod, a, which has the screw, b, passing through its upper end. This rod and screw

of the engravings as scarcely to require a description. form the gage by means of which all the teeth may

be bent at the same angle from the plane of the blade. By turning the screw, b, this angle may be varied for a wide or narrow set as may be desired.

The ownership of this patent is divided between James Clizbe and the inventor. Mr. Clizbe owns the right to all the Northern States lying east of the west line of the Ohio, with Kentucky, North and South Carolina, Virginia, Maryland and Delaware in the Southern States. Persons wishing to purchase rights or to act as agents in any of this territory will please address him at Quincy, Mich.

The right to the remaining portion of the country belongs to the inventor, Ruel Rawson, who may be addressed at the same place.

Rock Oil in England.

Mr. Alexander Macrae.oil and produce broker, of Liv-

my first circular. viz., that it would be second only in extent to cotton. I will even go a step further, and venture to assert that if the rocks and wells of Pennsylvania, Canada and other districts continue their exudation at the present rate of supply. the value of the trade in this oil may even equal American cotton. Montreal (internally. and likely externally by this time,) is lit with the white refined, and I can see no reason why London and Liverpool should not also be, for the oil gas distilled from the raw petroleum is immensely superior. and much more brilliant than our own coal gas. For years we have sent coals to America for gas works, and it will be a singular freak of events if she and Canada should now supply us with a better expedient. Invested interests will, perhaps, stay it for the moment, but will they ultimately? In my first circular it was stated that some 7,000 barrels of crude and refined were on the way to this country, and the London Times, of the 13th ult., mentions 8,000 barrels on the way to London. There are 10,000 barrels coming to Liverpool, and 2,000 barrels to Glasgow, in all about 20,000 barrels (worth £100,000 sterling, and the trade not six months old), a simple tithe

© 1862 SCIENTIFIC AMERICAN, INC