Woodworth's Patent.

" The schedule referred to in these letters patent, and making part of the same, containing a description in these words of the said William Woodworth himself, of his improvement in the method of planing, tonguing, grooving and cutting into mouldings, of either, plank, boards, or any other material, and for reducing the same to an equal width and thickness; and also for facing and dressing bricks and cutting mouldings on, or facing metallic, mineral and other substances.

The plank, boards, or other material being reduced to a width by circular saws, or friction wheels, as the case may be, is then placed on a carriage, resting on a platform with a rotary cutting wheel in the centre, either horizontal or vertical. The heads or circular plates fixed to an axis, may have one of the heads moveable, to accomodate any length of knife required. The knife fitted to the heads with screws or bolts ; or the knives or cutters for moulding fitted by screws or bolts to logs, connecting the heads of the cylinder, and forming with the knives or cutters a cylinder. The knives may be placed in a line with the axis of the cylinder, or diagonally.—The plank or other material resting on the carriage, may be set so as to reduce it to any thickness required ; and the carriage moving by a rack and pinion, or rollers, or any lateral motion to the edge of the knives or cutters on the periphery of the cylinder or wheel, reduces it to any given thickness. After pasting the planing and reducing wheel, it then approaches if required, two revolving cutter wheels, one for cutting the groove, and the other for cutting the rabbits that form the tongue ; one wheel is placed directly over the other, and the lateral motion moving the plank or other material between the grooving and rabbiting wheels, so that one edge has a groove cut the whole length, and the other edge a rabbit cut on each side, leaving a tongue to match the groove. The grooving wheel is a circular plate, fixed on an axis with a number of cutters attached to it, project beyond the periphery of the plate, so that when put in motion, will perform deep cut or groove parallel with the face of the plank or other material. The rabbiting wheel, also of similar form, having a number of cutters on each side of the plate, projecting like those on the grooving wheel, cuts the rabbit on each side of the edge of the plank, and leaves the tongue a match for the groove. By placing the planing wheel, axis, and cutter knives vertical, the same wheel will plane two planks or other matetial in the same time of one, by moving the plank or other material opposite ways, and parallel with each other against the periphery of the planing or moulding wheel. The groove and tongue may be cut in the plank or other material at the same time, by adding a grooving and rabbiting wheel.

Said William Woodworth does not claim the invention of the circular saws, or cutter wheels, knowing they have long been in use, but he claims as his invention, the improvement and application of cutter or planing wheels to planing boards, plank, timber, or other material ; also his improved method of cutters for grooving and tonguing, and cutting moulding on wood, stone, iron, metal, or other material, and also for facing and dressing brick ; as all the wheels may be used separately and singly for moulding, or any other purposes before indicated. He also claims as his improved method the application of circular saws for reducing floor plank and other materials to a width. Dated Troy, Dec. 4th, 1828. WILLIAM WOODWORTH.

Witnesses : Henry Everts : L. S. Gleason.

☞I certify the above is a true copy of the Schedule attached to my patent.

WILLIAM WOODWORTH.

Improved Claim.

This improved claim is the basis of all the issues of Woodworth's patent; and revised from the original, by Mr. C. M. Keller we believe.

CLAIM —The employment of rotating planes substantially such as herein described, incombination with rollers or any analagous device to prevent the boards from being drawn up by the planes when cutting upwards, or from the reduced or plained to the unplained surface as described. And also the combination of the rotating planes with the cutter wheels for tonguing and grooving, for the purpose of tonguing and grooving boards, &., at one operation as described. And also the combination of the tonguing and grooving cutter wheels for tonguing and grooving boards at one operation as described. And finally the combination of either the tonguing or the grooving cutter wheel for tonguing or grooving boards, &c. with the pressure rollers as described

Printing and Literature in China.

The Chinese lay claim to the invention of printing, at an early period. From the natnre of the language however, this art does not appear capable of much improvement, since the Chinese language consists of between 70 and 80 thousand characters, each character representing a distinct word. It seems almost impracticable to use moveable type, and therefore they adopt the plan of cutting in relief all the characters of the work to be printed, on slabs of very hard wood. The printer daubs these over with a preparation of Indian-ink, and the paper, being pressed upon them, receives the impression. One coating of printing fluid is sufficient for two or three impressions, but the paper being of too porous a nature to receive impression on both sides it becomes necessary to fold the paper. These doubled sheets are then stitched together, the fold is at the outer edge, with two coarser sheets of paper to form a cover. But the wealthier classes are as particular as we are, in their bindings, which are of beautifully figured silks and satins, sometimes of gold or silver tinsels. The Chinese being a reading nation, never destroy the slabs on which the characters are cut, which are laid by with great care, and the place of their deposit is referred to in the preface of the work.

Books are sold at so cheap a rate that they are within the reach of all. But it is deplorable to witness the depravity of taste so publicly exhibited in China, by the circulation of an enormous number of obscene publications and indecent engravings which are eagerly sought after. The taste for reading may be very cheaply gratified in China, by means of itinerant circulating libraries, which are carried about by their proprietors, in boxes slung over their shoulders. In no part of the world is education so universal as it is in China. In such estimation is literature held that literary attainments form the only passport to the highest offices in the state.—Each province is furnished with officers appointed to examine claimants or aspirants to state preferment, who go their circuits twice in each year. Each candidate must submit to repeated examinations previous to the distinction of being placed upon the books for preferment. When a man has reached the highest class of literary attainments he is examined by the Emperor in person, and if approved of by him he attains the highest honors. It would appear that genius or originality is not so much admired in China as memory. The power of reciting the greatest number of the sayings of their ancient sages is considered the acme of learning. Every literary honor confers the rank of a mandarin on its possessor ; and each grade is distinguished by its peculiar dress. Although honors are not hereditary (even the emperor selects whom he pleases as his successor from the royal blood,) yet the descendants of men of learning are treated with the greatest respect. In proof of this the descendants of Confucius, who died more than two thousand years ago are treated with the greatest consideration by all classes from the emperor to the lowest coolee. So highly is learning prized, that very frequently, deceased ancestors are ennobled in compliment to the attainments of their descendants. The emperor causes a book of merit to be kept, in which are recorded the various titles and descriptions of the mandarins, and those of their actions which are deserving of praise. Should however a mandarin be degraded (which frequently occurs) the reason of his punishment is stated with equal accuracy. Gazettes, by the emperor's command, are commonly published at Pekin, which contain imperial grants of land remission of taxes, public acts, &c. &c. The day which is selected by the emperor for all public executions is notified by means of this gazette. The degradation of mandarins is here announced ; and the events of war are bombastically set forth, which invariably represent the deeds of the nation as successful. The official reports contained in this gazette, during the late war, of the thousand upon thousands of the English who were daily slain and driven before their conquerors, were truly astounding.

Loss of the Victoria Balloon.

Mr Green, the veteran English æronaut, has had the misfortune to lose his celebrated Victoria Balloon, by means of which he has made many voyages, sometimes accompanied by a number of his friends. He had given notice of his intention to make his 409th ascension at Halstead on Oct. 27th, but a violent storm of wind and rain compelled him to postpone the excursion to the following day. On that day the weather had undergone no improvement. A great concourse of visiters, however, having assembled, the process of inflating the balloon was suffered to go on, in the hope that the storm might abate. The sequel is thus described by the London Times:

The committee had made the best possible arrangements ; all parties concerned were in harmony, and anxious to give satisfaction—but the elements forbade the fulfilment of their desires. The storm increased, the wind kept up its attacks on the restrained ærial monster as though determined to sweep it away. Moored to the earth by five strong ropes and stakes, ballasted by about one ton and a half of iron weights attached with ropes to ring or hoop, surrounded by about 30 or 40 powerful laborers and members of the committee, employed under the control of Mr. C. Green and his brother, in governing the furious rolling and violent lifts and plunges of the grand prisoner ; it seemed for a long time the efforts and resolute energy of humanity might be allowed a victory over the fury of the blast. But alas! about a quarter to 12, o'clock, when the hurricane was at its height the immense inflated creature was raised by a sudden jerk a few feet from the earth. Again and again it lifted and rolled and dashed itself to the ground ; and on the part of the brave fellows who stuck to the ropes and netting there was an indomitable preseverance scarcely conceivable. The danger of being dashed among the dangling weights, or violent hurled to the ground, was most imminent but all held on manfully until, at 12 o'clock, one of the long strained ropes was snapped by the throes of the immense machine. At once, the hoop with the iron weights and 20 human beings were lifted up six or eight feet from the ground. The hoop broke in halves, dropping men and iron weights in a confused heap beneath ; and doubling its height, the balloon rose to 16 or 18 feet, with the stakes by which it had been confined wrenched from the ground, and two or three men still hanging on the hoop. The netting however being no longer equally retained by the broken hoop, and the balloon rolling entirely over on its side in the air (owing to the detention of one remaining rope,) the netting suddenly ripped up on the side of the balloon then uppermost, and the silk enclosure, shelling itself out of the ripped envelope, burst from end to end. The men and weights and netting fell mingled in confusion—away flew the immense mass of silk, rent in every direction, and the grand balloon was no more !

The Power of Music.

Music exerts a singular influence over the minds of men, but perhaps over no man did it exert such a singular influence as over Martin Luther. One striking peculiarity of his character was his singular and enthusiastic love of music. Not that there is abstractly any thing remarkable in such a passion ; but in him it had a singular effect—contrasting strikingly with the bold and indomitable qualities of his nature. He had an admirable ear for harmony, and by no means unproficient on several instruments. He had also a beautiful voice, which he constantly kept in order by the chanting of hymns and several songs. The principles of church music he studied profoundly—and he composed several pieces of great merit. But the most striking thing about his musical character was the power which melody had over himself. He seemed melted and subdued into a state of almost helplessness by its tones. Amid their influence, all other faculties of body and mind appeared suspended :—he was in a state of ecstatic rapture. In letters which he wrote to Liuccius, (Frankfort edition 1647,) we find him jesting about his extreme susceptibility—which he considers as a weakness in his character. He tells Liuccius seriously that it was his custom to sing a hymn every night before he retired to bed ; and, such was the soothing power of the melody on him, that however much he might have been excited or troubled throughout the day, from the moment when the key fell upon his ear, he forgot all earthly matters and vexations.

TO CORRESPONDENTS.

" F. R. B. of Ill."—The engine we have would answer your purpose fully and you would be pleased with it. We could not dispose of the engine apart from the boiler. You probably saw the engraving and description of them which we published in No. 9 of this vol. Scientific American. Much obliged for the names you sent ; hope to receive more from you. $2, all right.

" H. J. B. C. of N. C."—J. Grant, Providence, R. I., we believe is the name of the gentleman to whom you refer. Further we have no recollection or way of ascertaining.

" G. W. of N. Y."—The expense of printing your table would be $25. We do not think it would pay.

" J. & P."—We have not yet got the claim you desired but whenever it is received you shall have it.

" H. C. of ——."—We doubt whether the application of a syphon formed pipe to the upper end of a pump would accomplish the object at which you aim. You can easily try.

A. S. of Ky."—Please accept our thanks for the very fine list of subscribers you have sent : we hope to keep them on our list always, together with others which you may hereafter send. We are glad to know that you are so well satisfied with the engine lathe we sent you, we presume you will not need any hint from us to tell your friends that whenever they wish machinery to send to the *Scientific American* office. A 4 horse engine and boiler, new and complete will cost you $450, 6 horse ditto $600. We can send you one of either size whenever you wish. Good second hand engines can be had for nearly one third less. Mr. S. has paid for your third volume. $8 all right.

" W. W. H. of Pa."—We received your letter and pamphlet with much pleasure. The first and second vols. of the Scientific American cannot be obtained. We saw sometime ago one of your muskets with which we were highly pleased. Would you not like to publish engravings of some of your inventions in our paper ? It would give you much creditable notoriety, and aid you in disposing of your Patents if you so desire. The expense would be trifling.

" F. of N. Y."—In last week's paper you probably saw an account of Remington's bridge which gave an outline of his mode of construction. The paddle wheel you refer to is not yet Patented, though measures are in progress. The paddles come from the water perpendicularly owing to the superior gravity of the metalic part ; but they do not preserve their perpendicularity in the water unless the pressure upon both surfaces is the same. On entering the water they seek such an angle as makes the pressure on both surfaces equal.

" J. A. P. of Ala "—You can obtain such a machine for from $10 to $35 of any manufacturer of Cotton Machinery.

" G. M. G. of Mass."—We could not dispose of one volume of the work as both must be taken together. Price $2. We have never seen a sieve exactly like yours. Send on your drawing.

" A. B. of Mich."—Both your letters have been received and the money remains with us subject to your disposal.

" C. L. of Ct."—There is little prospect of doing any thing this winter with *our* windlass. Relative to the other invention see answer to " I. A. of Pa." under Patent Correspondence.