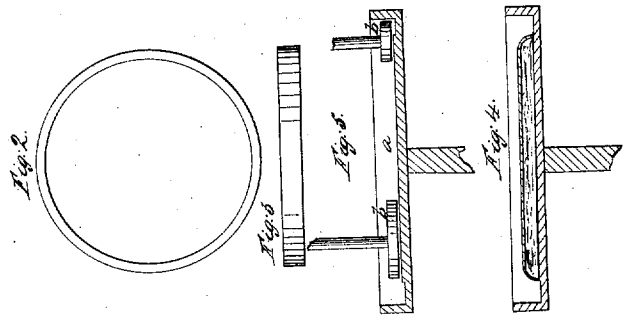
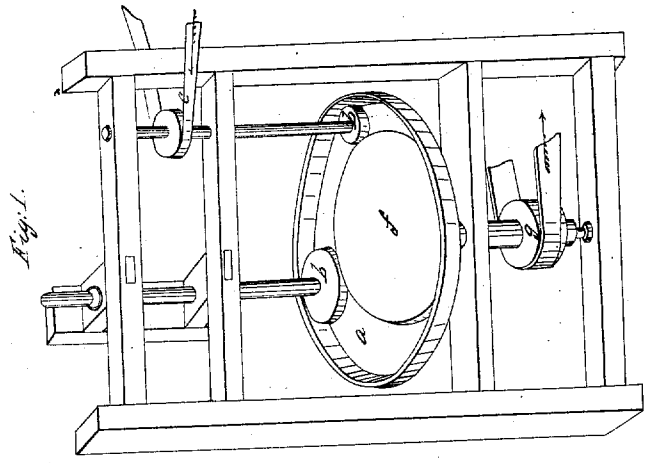
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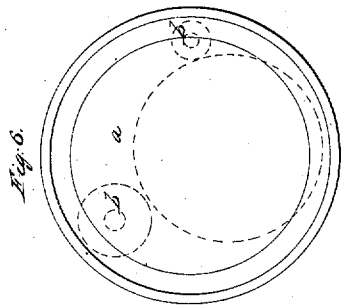
P. Cooper

Grinding Glass, &c.

Patented Mar. 24, 1835







N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

7106 Mar. 24. 1835

Peter Cooper New York City

Letters Patent

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Peter Cooper himself of his improvement in the art of grinding Stone Glass and metallic surfaces to perfect and polished planes

To all whom these presents shall come.

Be it known that I Peter Cooper of the City County and State of New York, has invented a new and useful improvement in the art of grinding surfaces to perfect and polished planes and that the following is a full and faithful description of the construction and operation of said Machine as invented by me,

This improvement consists in the successful application of a horizontal tub wheel and fixtures as herein after described to the grinding perfect and polished plane surfaces on Marble. Stone Glass metals &c. The construction of the tub wheel and its fixtures is as follows.

Upon the top of a perpendicular shaft resting below on its pivot and well secured about one foot from its upper end is to be fastened a horizontal tub wheel made of cast Iron or other material of which the tub wheel requires to be about one third larger in diameter than the diameter of thing to be ground and polished if already circular on its edge or to the circular rim herein after described to which things not round are to be secured. This tub wheel has a perpendicular rim rising about six inches above its upper plane surface, of lead or other material. The upper surface of the tub wheel is to be a perfect plane having a broad groove around it most therein said groove to be about six inches wide and two deep. Placed within therein near the plane of said tub wheel, but so as not to touch said wheel are three planes to be suspended from and each revolving on a descending shaft two wooden or other pulleys. one pulley to be one foot

Drawings [illegible]

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the diameter of Tub wheel aforesaid, the other pulley to be about one twelfth the diameter and to be near the rim and plane of said tub wheel and distant from the first pulley about one third the circumference of the rim of said tub wheel. This last pulley to be driven by a wheel and band at about one quarter less speed than the motion of the rim of the tub wheel aforesaid. All substances to be ground to plane surfaces if not round already are to be attached in any practical way within a circular rim of cast iron or other material said rim to be about one inch thick if made of cast iron and about four inches high and in diameter of rim about two thirds the diameter of the said tub wheel. Things are to be so attached to said rim that when placed in the tub wheel aforesaid the surface of the thing to be ground shall lay on the upper plane surface of the tub wheel. For the purpose of polishing the plane surface of the tub wheel is for the time to be covered with a leather cushion, or for practical purposes the above cushion may be attached to a similar tub wheel & fixtures constructed as herein before described; the said Cushion to have a surface as near a plane as possible. The construction completed the tub wheel & fixtures are put into operation by placing the article if round already and of proper size as a marble Table top &c. or else the circular rim before mentioned with the things to be ground and polished fastened within it upon the plane of the tub wheel having sand and water on its surface. The tub wheel is now to be set in motion by means of a wheel and band upon the perpendicular shaft aforesaid and propelled by steam or other power. The tub wheel to revolve toward the small pulley aforesaid. Now as the table top or circular rim revolves with the tub wheel it comes in contact with the pulleys aforesaid and is by them kept stationary again as the small pulley is at the same time put in motion revolving in the direction from the rim of the tub wheel to the table top &c giving to the table top or rim a second rotary motion and thus gradually reducing the Table top &c to a perfect plane — when the Table top &c is to be removed to the tub wheel with the cushioned plane to receive its final polish by coating said cushion with any

proper polishing material as in ordinary use. The motion of the fall by driven as aforesaid is to be so regulated as to give the table top or the like motion so as to wear the plane surface of tub wheel equally over its whole surface. and thus by its own wear to always keep the upper plane surface of the tub wheel aforesaid a perfect level plane.

The improvements in the above mention for which your petitioner claims Letters Patent. are. first. the successful application of a tub wheel with two regulating pullies as herein before described one of which pullies being driven by a wheel and band thus giving to the marble table top or other thing to be ground the required rotary motion so as to cause the upper plane surface of the tub wheel aforesaid to wear equally over its whole surface and thus by its own wear to always keep a perfect level plane and secondly. the successful application of the tub wheel and pullies as herein before described to the grinding perfect and polished surfaces on marble and marble table tops glass and plate glass. stones of all kinds. Lythographic stones, and every species of metal or metallic combinations

Peter Cooper

Witnesses
Edw C Cooper
Ebenezer Conklin

1106 words