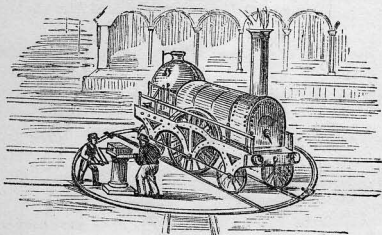




16 725. Ä

# GREAT INVENTORS:

THE  
SOURCES OF THEIR USEFULNESS,  
AND THE  
RESULTS OF THEIR EFFORTS.



*PROFUSELY ILLUSTRATED.*

LONDON:  
WARD, LOCK, AND TYLER,  
WARWICK HOUSE, PATERNOSTER ROW.

A

CAMDEN PRESS, LONDON.

h-38660-48

A

## PREFACE.

---

INVENTION has been defined as man's attribute, as creation is the attribute of God. Invention and discovery, although often distinguished from each other, are in fact identical. The man who completes an invention simply applies the result of his discovery to a specific end. Watt discovered the power of the vapour of boiling water, and invented the steam-engine, just by turning that power to account. The discoverer and the inventor alike search into things hidden, and discovering in consequence of that research certain principles, old as creation, but new to them and to mankind generally, they are enabled to achieve vast improvements in all material things, which tend so much to the comfort and convenience of man.

And one invention—one discovery—leads on to another. A great invention seldom appears before the world complete. It does not, like the fabled Minerva, leap fully armed from the forehead of Jove. It has to be improved, reconstructed, readjusted over and over again. Perfectibility is only to be attained by patient labour. And it usually happens that it is never the fortune of one man—or never his privilege—to begin, carry on, and achieve, a complete success with any one invention. He does what is in him towards success, and he leaves it for others to carry it on. Compare Guttenburg's process of printing with the machinery daily employed at the *Times* office; compare Symington's steam-vessel with the "Great Eastern;" and you see at once how many and how wonderful are the improvements that have been introduced.

But though it be true that the inventor never completes his invention; that the discoverer never thoroughly achieves his discovery, but dying leaves his labour "half undone," the praise is no less due to him—he has fairly won whatever wreath the world may have to give him. He has lain the foundation on