SELF-HEATING REVERSIBLE SAD IRON.

The engravings herewith presented show the different forms and combinations to be made with one of the reversible self-heating sad irons, and attachments belonging thereto, which has been recently invented by Mr. A. F. Chable, of Evansville, Ind. The iron is extremely simple in construction and practical in operation. As it requires no wick of any kind, trimming is never needed, and the disagreeable task of inserting a new wick in the lamp is done away with. It is safe and economical. Either gas, naphtha, gasoline, or alcohol can be used as fuel. Placed longitudinally in the body of the iron, the shape of which is clearly shown in the engravings, is a perforated tube that equally distributes the gas or vapors in the iron, generated from the burner of the lamp. The gas or vapor issuing from the tube may be ignited by inserting a lighted match in the iron, and the intense heat then produced in the chamber rapidly heats the faces of the iron. The body may be turned about the tube as an axis to bring either face into position for use, and is held in place by a suitable catch. The flow of the burning fluid from the reservoir can be adjusted with a key, so as to regulate the amount of heat as desired. There are four smoothing, two fluting, and two polishing irons. Two of the smoothing irons constitute two opposite sides of the body, and to the other two sides either of the above combinations can be readily attached. One most important feature of this iron is that it can be used as a stove, by simply locking the

The Albert Medal,

The Council of the Society of Arts, London, will proceed to consider the award of the Albert medal for 1887, early in May next. This medal was struck to reward "distinguished merit for promoting arts, manufactures, or commerce," and has been awarded as follows :

In 1864, to Sir Rowland Hill, K.C.B., F.R.S., "for his great services to arts, manufactures, and commerce in the creation of the penny postage, and for his other reforms in the postal system of this country, the benefits of which have, however, not been confined to this country, but have extended over the civilized world."

In 1865, to his Imperial Majesty Napoleon III., " for distinguished merit in promoting, in many ways, by his personal exertions, the international progress of arts, manufactures, and commerce, the proofs of which are afforded by his judicious patronage of art, his enlightened commercial policy, and especially by the abolition of passports in favor of British subjects."

In 1866, to Michael Faraday, D.C.L., F.R.S., "for discoveries in electricity, magnetism, and chemistry, which, in their relation to the industries of the world, have so largely promoted arts, manufactures, and commerce."

In 1867, to Mr. (afterward Sir) W. Fothergill Cooke and Professor (afterward Sir) Charles Wheatstone, F.R.S., "in recognition of their joint labors in establishing the first electric telegraph."

In 1868, to Mr. (afterward Sir) Joseph Whitworth, LL.D., F.R.S., "for the invention and manufacture of instruments, of measure and uniform standards, by research, the true relation between heat, electricity,

In 1875, to Michael Chevalier, "the distinguished French statesman, who, by his writings and persistent exertions, extending over many years, has rendered essential service in promoting arts, manufactures, and commerce.'

In 1876, to Sir George B. Airy, K.C.B., F.R.S., Astromer Royal, "for eminent services rendered to commerce by his researches in nautical astronomy and in magnetism, and by his improvements in the application of the mariner's compass to the navigation of iron ships."

In 1877, to Jean Baptiste Dumas, For. Memb. R.S., Member of the Institute of France, "the distinguished chemist, whose researches have exercised a very material influence on the advancement of the industrial arts."

In 1878, to Sir William G. Armstrong, C.B., D.C.L., F.R.S., "because of his distinction as an engineer and as a scientific man, and because by the development of the transmission of power-hydraulically-due to his constant efforts extending over many years, the manufactures of this country have been greatly aided, and mechanical power beneficially substituted for most laborious and injurious labor."

In 1879, to Sir William Thomson LL.D., D.C.L., F.R.S., "on account of the signal service rendered to arts, manufactures, and commerce by his electrical research, especially with reference to the transmission of telegraphic messages over ocean cables."

In 1880, to James Prescott Joule, LL.D., D.C.L., F.R.S., "for having established, after most laborious



TWO SMOOTHING, ONE FLUTING, AND ONE POLISHING IRON.



TWO SMOOTHING AND TWO POLISHING



TWO SMOOTHING AND TWO FLUTING IRONS.





THREE SMOOTHING AND ONE POLISEING.











FOUR SMOUTHING IRONS

THREE SMOOTHING AND ONE FLUTING.

merce.'

IRON USED AS STOVE, SHOWING FLAME.

HEAVY TAILOR'S IRON. FOUR SMOOTHING SURFACES.

CHABLE'S CHANGEABLE COMBINATION SELF-HEATING REVERSIBLE SAD IRON.

handle to the side and fastening the lamp in an upright position. By removing one of the detachable parts, any ordinary cooking vessel can be placed on the iron directly over the flame. This renders the device of great service in the sick room or nursery, where a hot fire is often needed quickly. The lamp is easily detached, and can be used for many different small articles, tempering tools, thawing out frozen

water and steam pipes, burning insects out of trees, etc. This invention has been patented in the United States, Great Britain, and France. All further information concerning the manufacture and introduction of this article on royalty, or concerning the sale of the patents, can be had by addressing the inventor as above.

The Patent Office.

to a state of perfection hitherto unapproached, to the a sure guide in the application of science and indusgreat advancement of arts, manufactures, and com- trial pursuits."

In 1869, to Baron Justus Von Liebig, Associate of the Institute of France, For. Memb. R. S., Chevalier of the Legion of Honor, etc., "for his numerous valupurposes, such as heating soldering irons, brazing able researches and writings, which have contributed most importantly to the development of food economy and agriculture; to the advancement of chemical science, and to the benefits derived from that science by arts, manufactures, and commerce."

In 1870, to Ferdinand De Lesseps, "for services rendered to arts, manufactures, and commerce by the realization of the Suez Canal."

In 1871, to Mr. (afterward Sir) Henry Cole, K.C.B. " for his important services in promoting arts, manufactures, and commerce, especially in aiding the es-

which the production of machinery has been brought and mechanical work, thus affording to the engineer

In 1881, to August Wilhelm Hofmann, M.D., LL.D., F.R.S., Professor of Chemistry in the University of Berlin, "for eminent services rendered to the industrial arts by his investigations in organic chemistry and for his successful labors in promoting the cultivation of chemical education and research in England."

In 1882, to Louis Pasteur, Member of the Institute of France, For. Memb. R.S., " for his researches in connection with fermentation, the preservation of wines, and the propagation of zymotic diseases in silk worms and domestic animals, whereby the arts of wine making, silk production, and agriculture have been greatly benefited."

In 1883, to Sir Joseph Dalton Hooker, K.C.S.I., C.B., M.D., D.C.L., LL.D., F.R.S., "for the eminent ser-

It is to be regretted that Commissioner Montgomery	tablishment and development of science and art,	vices which, as a botanist and scientific traveler, and
insists upon resigning, although his description of his	and the South Kensington Museum."	a director of the National Botanical Department, he
official existence is anything but alluring. "Many a	In 1872, to Mr. (now Sir) Henry Bessemer, F.R.S.,	has rendered to the arts, manufactures, and commerce
day," said he to a local reporter, "the only thing that	"for the eminent services rendered by him to arts,	by promoting an accurate knowledge of the floras and
kept me from kicking a man, a congressman, may be,	manufactures, and commerce, in developing the manu-	economic vegetable products of the several colonies
out of my office was that it was a public office, and	facture of steel."	and dependencies of the empire."
did not belong to me. Day after day I have sat in the	In 1873, to Michel Eugene Chevreul, For. Memb.	In 1884, to Captain James Buchanan Eads, "the dis-
Patent Office, subjected to the insolence and abuse	R.S., Member of the Institute of France, "for his	tinguished American engineer, whose works have been
from the office seekers, which I would not have suf-	chemical researches, especially in reference to saponi-	of such great service in improving the water communi-
fered for a single moment had I been in my own law	fication, dyeing, agriculture, and natural history,	cation of North America, and have thereby rendered
office. Naturally, I am not such an ill-tempered per-	which for more than half a century have exercised a	valuable aid to the commerce of the world."
son myself, but I fear that the nagging I have had to	wide influence on the industrial artsof the world."	In 1885, to Mr. Henry Doulton, "in recognition of
stand during my two years of office has taken a good	In 1874, to Mr. (afterward Sir) C. W. Siemens, D.C.L.,	the impulse given by him to the production of ar-
deal of the good temper out of me. Women, too, are	F.R.S., "for his recearches in connection with the	tistic pottery in this country."
the cause of it. There is only one thing more difficult	laws of heat, and the practical applications of them to	In 1886, to Mr. Samuel Cunliffe Lister, "for the ser-
to get rid of than a woman seeking office for herself,	furnaces used in the arts; and for his improvement in	vices he has rendered to the textile industries, espe-
and that is a congressman seeking office for a woman."	the manufacture of iron; and generally for the ser-	cially by the substitution of mechanical wool combing
Mr. Montgomery has made an admirable commission-	vices rendered by him in connection with economiza-	for hand combing, and by the introduction and devel-
er, and it is to be regretted that the office seekers are	tion of fuel in its various applications to manufac-	opment of a new industry-the utilization of waste
driving him away.—The Manufacturers' Gazette.	tures and the arts."	silk."
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