

dable preconceptions as well as with gigantic interests. Nevertheless, it may now be predicted with confidence, that we are on the eve of another great revolution, produced by the application of an agent more economical and incalculably safer than steam. A few years hence we shall hear of the 'wonders of caloric' instead of the 'wonders of steam.' To the question: 'How did you cross the Atlantic?' the reply will be: 'By caloric of course!' On Saturday, I visited the manufactory, and had the privilege of inspecting Ericsson's caloric engine of 60 horse power, while it was in operation. It consists of two pairs of cylinders, the working pistons of which are 72 inches in diameter. Its great peculiarities consist in its very large cylinders and pistons, working with very low pressure, and in the absence of boilers or heaters, there being no other fires employed than those in small grates under the bottoms of the working cylinders. During the eight months that this test-engine has been operation, not a cent has been expended for repairs or accidents. The leading principle of the caloric engine consists in producing motive-power by the employment of the expansive force being produced by compression of the air in one part of the machine, and by its dilatation by the application of heat in another part. This dilatation, however, is not effected by continuous application of combustibles, but by a peculiar process of transfer, by which the caloric is made to operate over and over again—namely, the heat of the air escaping from the working cylinder at each successive stroke of the engine, is trans-

ferred to the cold compressed air, entering the same; so that, in fact, a continued application of fuel is only necessary in order to make good the losses of heat occasioned by the unavoidable eradication of the heated parts of the machine. The obvious advantages of this great improvement are the great saving of fuel and labour in the management of the engine, and its perfect safety. A ship carrying the amount of coal that the Atlantic steamers now take for a single trip, could cross and recross the Atlantic twice without taking in coal; and the voyage to China or California could be easily accomplished by a caloric ship without the necessity of stopping at any port to take in fuel. Anthracite coal being far the best fuel for this new engine, we shall no longer have to purchase bituminous coal in England for return-trips. On the contrary, England will find it advantageous to come to us for our anthracite. A slow radiating fire without flame is what is required, and this is best supplied by our anthracite. The *Ericsson* will be ready for sea by October next, and her owners intend to take passengers at a reduced price, in consequence of the reduced expenses under the new principle.

The cutting of the Koh-i-Noor has proceeded in the most satisfactory manner up to the present time; the difficulty which suggested itself originally has been successfully overcome, and all fears of any injury to the diamond during the operation are at an end.

MRS. GRUNDY'S GATHERINGS.

CHIT-CHAT FOR SEPTEMBER.

THE continued warm weather forbidding a return to town, or any activity in the display of new fashions, we cannot interest our readers more than to quote for their benefit some *invaluable* hints on dress, taken from the "London Quarterly." We wish we had space for the whole article; as it is, we know of very few ladies in city or country but may be benefited by the taste and common sense—a rare combination—which these extracts display.

The true object and importance of taste in dress, few women understand. "Even if woman had been made as ugly as we," says the author, "she would still, no doubt, have been the object of our highest intellectual devotion; but woman was made 'exceedingly fair,' a creature not only fitted for all the deference and homage our minds could bestow, but obviously intended for the most elegant wardrobes and brilliant *trousseaux* our pockets could furnish. But, however we may fall short of our duty to the sex in this latter respect, let no woman therefore suppose that any man can be really indifferent to her appearance. The instinct may be deadened in his mind by a slatternly, negligent mother, or by plain maiden sisters; but she may be sure it is *there*, and, with a little adroitness, capable of revival. Of course, the immediate effect of a well-chosen feminine toilet operates differently in different minds. In some, it causes a sense of actual pleasure; in others, a

consciousness of passive enjoyment. In some, it is intensely felt while it is present; in others, only missed when it is gone.

"Such being the case, the responsibility of a wife in this department is a very serious one. In point of fact, she dresses for two, and, in neglecting herself, virtually annoys her husband. Nature has expressly assigned her as the only safe investment for his vanities; and she who wantonly throws them back from their natural course, deserves to see them break out on his own person.

"But independent of the plain law of instinct, there is one for the promotion of dress among ladies, which may be plainer still to some—and this is the law of self-interest. Wm. Honeycomb says he can tell the humour a woman is in by the color of her hood. We go farther, and maintain that, to a proficient in the science, every woman walks about with a placard, on which her leading qualities are advertised.

"For instance, you meet one, no matter whether pale or rosy, fat or thin, who is always noticeable for something singular and *outré* in her dress; a bonnet with blue and pink trimming, or of a new color never imagined before; a gown so trimmed that she cannot lean back upon it; a cloak so cut that she cannot walk upright in it; a new kind of quilling which scratches her, and catches every body else, a new pattern which blinds the eyes to look at: a *berthe* strung of beads from Novæ Zembla; a boa woven of feathers from New