

of the benefaction bestowed on this and coming generations. The inventions that have worked their way into permanent success, unaided and alone, by their intrinsic merit, are those which have been most valuable to science and the world, and which have revolutionized old methods, supplanting them with practical and beneficial mechanism. Such an invention is the Type-writer, brought to its present high state by a firm whose fame is world-wide, and who deserve no faint commendation for the perfection to which they have brought this remarkable and thoroughly practical instrument, by the expenditure of thousands of dollars in the employment of the latest and best improved machinery, and the most skilled mechanics in America—foremost of whom, the superintendent of this department in Ilion, Mr. W. K. Jenne, deserves no small share of praise—in their aim to give the world a perfect writing machine, combining all modern devices with strength and durability, and all the requirements for everyday use. Does it not seem strange that in the world's progress, extending over thousands and thousands of years, yet even in this, the era of great inventions, scarcely any improvements have been made in the primitive methods employed by the ancients? They used the stylus, and we do to-day, and we would still be scratching paper with a stick, making unsymmetrical hieroglyphics that Carlyle aptly calls "chirographical semersaults," or what would answer well to a description given of Horace Greeley's writing, "a gridiron struck by lightning," were it not for the Type-writer, whose busy click, click can be heard in the study and office of the leading men in all the walks of life and business.

The heroism of those who fought and bled for us in '76 was in great part a matter of physical endurance. Their lives were perpetual drains on the brawn of the human system, and ours just as steadily calls on the brain. I reiterate that their heroism was in great part a matter of beef and pork and beans, a matter of physique. War to-day takes a soldier from the gateway of his barrack, and conveys him by rail to the threshold of death, with hardly one strain of his muscular fibre; nerve force is the essential element of the fighting man who woos the God Mars in our age. Muscle is still required, but in an always decreasing ratio. The time may come when opposing forces will be destroyed without the aid of a single violent muscular contraction. As to the desirability of

that revolution,—well, on that head I've no opinion to offer on the moment. All I contend is, that war to-day is more trying on the nerves than it was in "ye olden time."

The same results are reached in the arts of peace by means exactly similar. The carnival of invention and discovery, is, of course, more applicable to the subject in hand. Muscle goes every day a little farther to the rear in all and every form of human endeavor. Stress on the nervous system is the foe of modern life. Hundreds and thousands of brain-workers are, at this very moment, in danger of one and another form of paralysis, from the urgency of the calls on the nerve centres, and until within a few years there was no relief from the scratch, scratch of the pen. Then came the Type-writer, accomplishing what had for centuries been thought impossible, if indeed it had been thought of at all.

The strain that is occasioned by the work of an ordinary brain-worker, or one accustomed to mental effort, would throw a hod carrier into convulsions. Many of us have seen tangible evidence of how nervous systems have been over-wrought, prostrated, brought to a standstill. The hand that grasped the pencil held it with such force as to almost break the little instrument. What followed? Complete inertia—absolute want of power to form a letter—the break. The time had come to find if the inventor who had done so much for the soldier and farmer, in fact, for all who perform mechanical operations, was potent enough to help the pen-writer.

Little did Guttenberg and Faust think that one day their wonderful invention would lead to the utilization of their methods in a machine that would be the stylus for everyday use. To many minds the Type-writer is suggestive of having to learn the art of Faust and Guttenberg, an amount of labor that would make it impracticable, in fact, an impossibility, for the average writer to earn a livelihood with. The manipulation is so familiar to all that it would indeed be "carrying coals to Newcastle," and might well offend your self respect, if I hazarded one syllable of instruction.

I cannot call to mind, though I am perhaps a little prejudiced, a single invention that is destined to be a more universal auxiliary as an economizer of time and labor than the perfected Type-writer. At first, like even the sewing machine, jealously regarded by the majority of the people as a luxury, even as a toy, that only