congenital variation, and not the accidental scar, that the daughter had inherited.

AMATEUR PHOTOGRAPHY IN THE SUMMER OF 1889.

THOSE who ventured to take photographs with the dry plates of eight years ago thought the art a simple one, and well suited to the needs of every one who was willing to go to any trouble in securing photographic record of sights and scenes in which he might be interested.

A year ago the Kodak was brought on the market. In this camera, which is known to all, and whose products are so favorably received wherever shown, in place of the glass negative of the

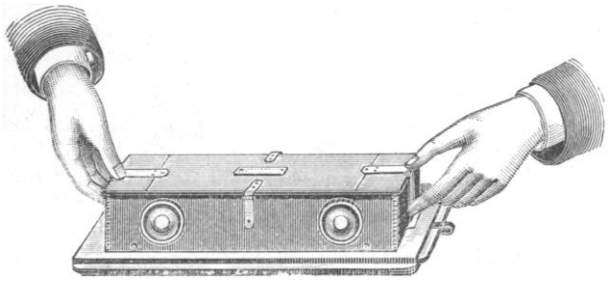

FIG. 1.

past was substituted a strip of sensitized paper stretched between two reels.

This was but a partial solution of the problem, for the paper is of necessity opaque, and to secure the best results it was necessary to strip the delicate film from the paper and attach it to glass or some other transparent support. This was a tedious process. A recent discovery and invention by Mr. George Eastman of the well-known firm in Rochester, obviate every difficulty. He has succeeded in producing a strong and perfectly transparent support, of great flexibility and extreme thinness, which can be wound upon rollers, to be exposed, developed, and printed like ordinary glass negatives. The transparent support is a modification of celluloid, specially prepared by a process invented by Mr. Eastman. The celluloid product is but four one-thousandths of an inch in thickness, and the gelatine film upon it is one two-thousandth of an inch

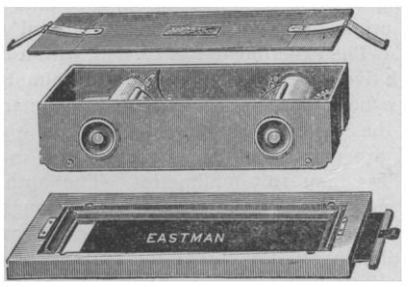

FIG. 2.

in thickness. It will thus be seen that a great magazine of photographic material can be carried in a very small space, and with no inconvenience on account of weight. Every operator can develop and print his own negatives and refill his magazine, with the exercise of only ordinary skill.

Mr. Eastman has removed the greatest difficulty in the way of rapid and satisfactory outdoor work, while adding facility in indoor photography, especially on large work. The handling of large plates is always difficult, and attended with serious risks. The flexible, transparent support makes the handling easy, and the results secure. The new support has been thoroughly tested. It withstands sun-heat necessary in printing, and is unaffected by the chemicals employed in development and other photographic processes.

The accompanying illustrations show the film-holder for the Kodak camera. Fig. 1 shows the holder closed; and Fig. 2, the same open, with a view of the two reels.

HEALTH MATTERS.

The Alleged Spontaneous Combustion of the Human Body.

WHEN "Bleak House" appeared, in 1853, novel-readers were treated to a new sensation in the way of a death-scene, when Krook was taken off the stage by spontaneous combustion, "of all the deaths that can be died." The public shuddered, and medical readers smiled. The subject was then to most physicians, as it is now, well inside the border of medical mythology.

Within the past year or two, several cases have been put on record, which, with the list previously accumulated, serve to establish pretty clearly, in the opinion of *The Boston Medical and Surgical Journal*, "the fact of an occasional abnormally increased combustibility of the human body, which, it should be observed, does not necessarily imply ignitability, or true spontaneous combustion."

For instance: Dr. Booth's case, which is reported, with a photograph of the nearly consumed remains, in the *British Medical Journal* (vol. i. 1888, p. 841), is of a pensioner, aged sixty-five, of very intemperate habits, who climbed into a hay-loft while drunk, at nine P.M. Neighbors saw by a skylight a light struck, which after a while was put out. At eight the next morning, the body, with all its soft parts consumed, was seen lying over a hole in the floor which had nearly burned through, but had one or two joists that kept the body from falling through. The chance of the application of fire to the man's clothes is here distinctly stated; and the combustion, remarkable as it was, is not shown to have been spontaneous.

Again, Middlekamp, in the *St. Louis Medical and Surgical Journal*, October, 1885, reported a similar case of nearly complete combustion, where the victim, a man of sixty-six and a drunkard of twenty years' standing, fired a gun at his own breast with a ramrod. Here the heat was so intense as to melt the ramrod and a metal buckle. The body was consumed entirely, except the lower part of the legs, the head, and the arms.

In the *Therapeutic Gazette* of the current year, two more such instances are reported. One of these, Dr. Clendenin's case, was an old Irish woman, addicted to the excessive use of whiskey, of which she had drunk a quart the day she died. She had always been the last of the household to go to bed, and so always extinguished the tallow candle (their sole means of illumination). There was also a fire in the kitchen stove. The inner walls of the house were covered with greasy soot, and the two old men who were the only other occupants were both asphyxiated. A hole was found burned through the kitchen floor about two and one-half by three feet square. Upon examining the opening in the floor, a mass of cinders was discovered on the ground beneath. Upon removing them, the skull, the cervical, and half the dorsal veretebræ were found reduced very nearly to a cinder, also about six inches of the right femur, together with part of the ilium in about the same state as the vertebræ. The feet were found in the shoes: the left foot was reduced to a cinder, the shoe being partially calcined; the other foot and shoe were reduced to a complete cinder. On removing, the entire remains of a woman, who a few hours previous had weighed one hundred and sixty pounds, were placed in a box that would hold less than one bushel. The entire remains weighed twelve pounds. The pine joint against which the remaining cinders lay were slightly charred, but not burning when found.

To burn the human body, under ordinary circumstances, as the editor of the journal states, is not an easy thing. The great heat secured in crematories, and the length of time even then requisite to incinerate the body, illustrate this fact. It has been shown that the body is three-quarters water, and a great deal of combustible material is a necessary adjunct to the successful reduction of so non-inflammable a substance. What, then, is it that occasionally imparts to it so abnormal a susceptibility to flame? Here theories are at fault. We may safely say that it is not, as has been claimed by some, alcohol deposited in the tissues: for Liebig found that flesh saturated in that liquid would burn only until the alcohol was consumed. The hydrogen theory is also fanciful; and the best explanation, namely, an abundant deposit of fat in the cells of the body in such cases, fails to account for the fact that not