

and successfully practised. Mr. Edmund Becquerel has succeeded in transferring to a Daguerreotype plate the prismatic spectrum, with all its brilliant color; and also, though in an inferior degree, the colors of the landscape. These colors, however, are very fugacious; yet, though no method of fixing them has yet been discovered, we cannot doubt that the difficulty will be surmounted, and that we shall yet behold all the colors of the natural world transferred by their own rays to surfaces both of silver and paper.

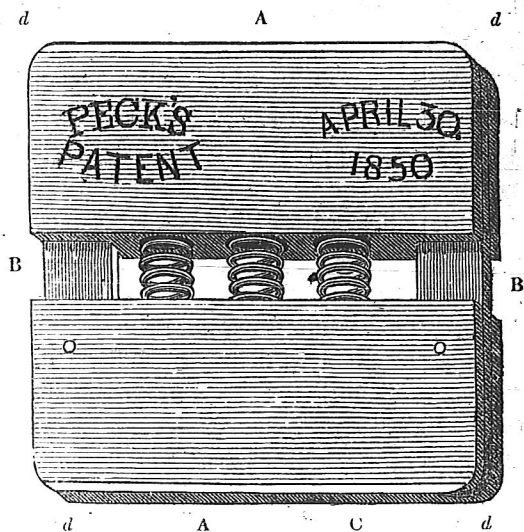
The most important fact in Photography is the singular acceleration of the process discovered by M. Niepce, which enables him to take the picture of a landscape illumination by diffused light in a single second, or at most in forty seconds. By this process he obtained a picture of the sun on albumen so instantaneously, as to confirm the remarkable discovery previously made by Mr. Arago, by means of a silver plate, that the rays which proceed from the central parts of the sun's disc have a higher photogenic action than those which issue from its margin.

#### SUBMARINE TELEGRAPH.

The Submarine Telegraph, between Dover, England, and Cape Greves, on the French coast, has at length been carried out, and messages have been transmitted from side to side with the same facility as between overland stations. After being first laid down it was broken by friction along the French coast; it is now strengthened by being encased in rope-yarn, so as to give it the appearance of a 6 inch cable. In laying it out, the wire was wound on a seven feet drum placed across the deck of a steamer, right amidships. This done, and the wire made fast on the Dover side, the vessel steamed out at 5 miles an hour, uncoiling the wire as it went, leaden weights being attached to it as it passed over the stern. The distance across from point to

point is 21 miles, but 27 miles of wire were used; the copper wire is scarcely thicker than a knitting-needle, but is encased in a thick tube of gutta percha. Six wires are to be laid down to avoid accidents from fracture.

#### PLATE HOLDER.



The above cut represents a plate-holder invented and patented by Mr. Samuel Peck, of New Haven, Ct.

A, A, is the bed secured permanently to the bars B, B. C is a part of the bed which slides on the bars B, B, and which is acted upon by the three spiral springs shown in the centre of the block between the two bars B, B. The white lines *d, d*, on the outer edges of the bed pieces A, A, represent two brass plates inserted in the edges of the bed, so as to catch the bent edges of the plate, and thus secure it to the block.

Accompanying these holders can be had a small apparatus for bending the edges of the plate, or they may be had bent ready for use. In the use of these holders, wax is entirely done away with. In most cases the holder will be found desirable when any block is used. As to the relative merit between these and other patterns we leave for the artist to judge. L. Chapman, of this city, is proprietor of the patent.