

nearly the same radius as the curve of the glass. The practical effect of such an arrangement is, that during the act of immersion or removal of the plate, unless extraordinary caution be used, the film is liable to come in contact with the inner surface, and suffer injury. I propose that the side against which the plate leans should be of the same curve as, or rather larger, than the glass, and the opposite side an arc of a much larger circle, or indeed quite straight. We can thereby prevent the least chance of any part of sensitized surface from becoming injured by coming in contact with the sides. A larger quantity of silver solution will necessarily be required; but that I consider not only no disadvantage, but an actual gain, inasmuch as the bath will keep in good working condition for comparatively a much longer period.

**Plates. Defects in.**—If I call your attention now more closely to the specimens on the table, you will see that some of them are sharp and well defined up to the very edge of one side of the plate, but less so towards the other end. This arises from a defect in the lens—which, as I have said before, seems perfect—but from some slight variation in the curve of the plates. A variation of less than  $\frac{1}{4}$  inch in the curvature will throw the image considerably out of focus, when working with a lens of which the range of focus from near to distant objects is very limited. I feel certain our glass manufacturers can easily get over this difficulty, so I need say no more about it. In all other respects a limited range of focus is advantageous, for, the best of best definition having been once ascertained and asked, no more focussing is required.

Allied to the previous defect, and partly dependent on it, is the difficulty of obtaining an even pressure on the printing-frame. No matter how many folds of flannel or felt may be interposed between the prepared paper and the pressure-board, there will still be some part of the proof not so well defined as the sharpness of the negative would lead us to expect. An air-cushion of Macintosh cloth, or other air-tight material, and covered on one side with thin felt or fine flannel, seems to me a simple and certain remedy.

In conclusion, I trust Messrs. Sutton and Ross will receive these suggestions of mine in the same spirit in which they are offered, viz., a desire to improve and extend the use of a lens and camera which have proved highly satisfactory in my short practice, and which in subjects of a particular class will, I believe, exercise no small influence on the future of photography.

Correspondence.

FOREIGN SCIENCE.

[FROM OUR SPECIAL CORRESPONDENT.]

Paris, 4th June, 1862.

“Passed among modern inventions be photography. It has no rival on earth except the printing-press, but it works a thousand times quicker; it sheds a light upon all mysteries; it rules over darkness as a sovereign power, and brings to light, by light, an inexhaustible quantity of hidden treasures which mankind would, without its aid, have remained ignorant of for ever.”

Such is the eloquent apostrophe to photography written by the eminent publisher, L. Curmer, in his prospectus of a magnificent edition of *Les Evangiles*, he is now publishing. Remarkable as are all the productions of this enthusiast, especially his *Imitation de Jesus Christ*, his *Heures de la reine Anne de Bretagne*, this new edition of the Evangelists surpasses them all, and this excellence is due entirely to photography. A short description of this bibliographical curiosity may be not without interest. The work consists of 400 pages of text, each surrounded with the richest ornamental borders, beside 100 miniatures from coloured photographs, copies of rare manuscripts executed by Jean Fouquet, Hans Memling, Albert Durer, Julio Clovis, Angelico da Fiesole, Atavante, Lorenzo Monaco, and others, and preserved in the libraries of Paris, London, Oxford, Brussels, Munich, Turin, Milan, Venice, Bologna, Florence, Rome, Naples, St. Gall, Rouen, Lyons, Grenoble, &c.

M. Curmer speaks with gratitude of the readiness with

which the precious manuscripts contained in the hidden recesses of various libraries were placed at his disposal. He has good reason to be grateful to photography. In the library of Brera he copied forty magnificent pages of the rare *Antiphonaries* preserved there. At Venice he found himself in the presence of that miracle of art, the *Breviary* of Cardinal Grimani, with its eight hundred leaves of vellum radiant with the genius of Memling, Gerard d'Anvers, and Lieven of Ghent. At Florence he copied the six-and-twenty precious *Antiphonaries* of the Duomo, representing the miracles and sufferings of Christ. At Rome he obtained an audience with Cardinal Antonelli, in order to procure admission to the manuscripts of the Vatican. Permission to view these treasures was readily accorded, but, in obedience to inviolable rules, photography was strictly prohibited. The Cardinal himself could not exceed his powers. What was to be done? An audience with His Holiness the Pope was sought and obtained. An offering of the publisher's previous publications so won upon his Holiness admiration and sympathy, that he wished a gold medal bearing his effigy to be presented to the favoured publisher, as a mark of his esteem. Now was the critical moment! Could his Holiness permit any obstruction to impede the publisher's project of an unique edition of the Evangelists? Certainly not. The necessary permission to photograph the MS. of the Vatican was graciously accorded, and the *Bible* of Matthias Corvin, *The Bible and History* of the Dukes of Urbino, and the *Dante* of Julio Clovis contribute some of the most beautiful pages to the Evangelists.

Should any of your rising young artists ever find themselves at a loss for a subject for a cartoon I think this little episode, suggestive of a scene representing *the Pope interceding for Photography*, well worthy their attention.

In Italy M. Curmer was fortunate in meeting with artists who could colour his photographic copies in a style equal to that of the originals. These, again, are reproduced in facsimile by chromolithography, and the result is truly wonderful. The cost of such a work must necessarily be high; this, when completed, will amount to twenty-five pounds sterling; but its publication in parts renders it accessible to persons of very modest income.

You may expect to see shortly some truly mammoth specimens of photography, being copies of some of Kaulbach's cartoons, the figures as large as the original drawings. The specimens measure some six feet by three feet. Your Great Exhibition contains photographs of Kaulbach's drawings to illustrate Goethe's Heroines, and it is not unlikely that these colossal specimens will soon form an addition.

CARBONATE OF SILVER IN THE NITRATE BATH, &c.

SIR,—You were good enough some few weeks ago to insert a short communication of mine on some “Experiments with a Nitrate Bath.” I find in the last number of the *Photographic Notes*, Mr. Sutton has done me the honour to reprint it; but, as in doing so, he has introduced some additional comments which, I think, not altogether warrantable, I shall be glad if you will give me a corner in your journal for some remarks thereon.

Mr. Sutton thus comments upon my communication:—  
“Mr. Blanchard says, ‘before adding acid to neutralize the alkalinity,’ &c. This is an error. A nitrate bath, to which carbonate of soda has been added, may be rendered neutral, but never alkaline. The carbonate of soda continues to throw down carbonate of silver, as long as any silver remains in the solution, and this does not render the bath alkaline.” &c.

Now, the Editor of the *Notes*, in his comments, has overlooked the important fact of the case, viz., that carbonate of silver is soluble to a very considerable extent in the bath, under certain conditions.

When salts of ammonia are employed in the collodion,