

# IMAGE

Journal of Photography of the George Eastman House

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## THE PRESIDENTIAL INAUGURATION OF 1865



PRESIDENTIAL INAUGURATION of Abraham Lincoln, March 4, 1865. Lincoln is standing behind the table in the center, reading his speech. Photographed by Alexander Gardner. Reproduced by courtesy of Frederick Hill Meserve from a photograph in his collection.

## CENTENARY OF THE R.P.S.

THE Royal Photographic Society of Great Britain, the oldest in existence, celebrates its one hundredth anniversary this year.

Ever since the Great Exhibition in the Crystal Palace in 1851, there had been a growing desire on the part of photographers in England for the formation of a center of union which would be open to all interested in photography, whether professional or amateur. In France, the Société Héliographique had already been formed, and in America small organizations of professionals had banded together, largely for economic, rather than for cultural or social purposes.

Inspired by what was going on abroad, a provisional committee was formed of interested photographers, including Roger Fenton (who was later to win fame for his Crimean War documentation), Robert Hunt, and Peter LeNeve Foster. At the outset they faced a baffling problem. Photography was patented in England. Nobody could practice the calotype process—even for his own amusement—without a license from the inventor, William Henry Fox Talbot. This placed a burden on amateurs, who hesitated to pay the required fee, even though it was substantially less than the professional fee. They must have been tempted to take photographs privately without consulting Talbot. Roger Fenton stated later that “an independent Society was found incompatible with the existence of the patent.” They opened negotiations with Talbot who made a proposal that, in retrospect, certainly seems fair. He told Robert Hunt, the spokesman for the group, that if the society was formed upon “a very respectable basis,” he would give a license to each member.

This generous offer did not solve the difficulty. Talbot wrote Hunt: “*Private*. I assure you that I have the best wishes for the formation of a prosperous society, but it appears to me that there is not much *reciprocity of feeling* on the part of those who would naturally take a leading part in it. However, I have done all that lay in my power.”

Photographers did not want any special privilege for the society which—even before it was founded—put the general good of photography before the personal interests of the members—a policy which has been followed ever since. The committee wanted Talbot to surrender his control of photography, even though his patent was entirely legal. A direct appeal was drafted in the form of an open letter, which was left at the Society of Arts for signatures. But it was the personal contact of the presidents of two of the most powerful organizations in England, the semi-official Royal Academy and Royal Society, which finally swayed the inventor. In July, 1852, Talbot made a free gift of his invention to the public, reserving for himself only the control of the use of the calotype for making commercial portraits.

In December a photographic exhibition was held at the Society of Arts. It was the largest yet organized in England: over eight hundred prints were on display. Following immediately upon the success of this spectacular demonstration of the position photography had come to occupy, the committee announced in the newspapers that a public meeting would be held on Jan. 20, 1853, to inaugurate the Photographic Society.

Fox Talbot was invited to take the chair, but he declined, and Sir Charles Eastlake, president of the Royal Academy, consented. “I conceive it to be unnecessary in an assembly like this, to say one word on the uses and advantages of Photography both to Science and Art,” he began, and after thanking Talbot for “the liberality with which he has thrown open his invention to the enterprise of men of science, of amateurs, and of artists,” he asked Fenton to read the Report of the Organizing Committee. After this account of the past history, Sir William J. Newton then moved “That a Society be now established to be called ‘The Photographic Society’.” There was some discussion if the society should be independent or a part of the Society of Arts. Those in favor of independence carried the floor. Sir Charles was elected president with a council of twenty-five to manage the affairs.

From the beginning, a careful balance has been consistently maintained of the several branches of photography. At the first meeting there were papers on artistic, scientific, technical, and industrial applications of photography. A Journal was commenced, and in July Queen Victoria and the Prince Consort consented to serve as patrons.

The Royal House has ever since continued to support the Society. The Queen attended the first annual exhibition. And in 1893 she granted the Photographic Society the right to add the word “Royal” to its title.

In its long and distinguished existence, the Society has become international. Of the seven thousand present-day members, one quarter reside outside the United Kingdom. This is in keeping with the aims of the founders: “it should be the especial aim of the Society to keep up a constant intercourse between itself and those of its members who may be pursuing the practice of the art in distant quarters of the world,” Fenton wrote in the first issue of the *Journal*.

Membership in the Royal Photographic Society has for years been divided into three classes: Ordinary Members, Associates, and Fellows. Membership is open to all. The Associateship is granted to those members who prove, by submission of work, that they are competent. The Fellowship is granted to those who give evidence to the Council that they have distinguished ability. By thus acting as an examining body, the Royal Photographic Society—like many another British society—provides a way by which the qualifications of a photographer, scientist, educator, or scholar can be judged. The letters A.R.P.S. and F.R.P.S., which Associates and Fellows are entitled to put after their names, are comparable to degrees.

Within the Society there are six subordinate groups, which are open to members: Color, Kinematograph, Medical, Miniature Camera, Pictorial, and Scientific and Technical. These groups hold regular meetings devoted to the subject of their special interest.

Honors bestowed by the Royal Photographic Society are among the most coveted in the world of photography. The Honorary Fellowship has come to three Trustees of the George Eastman House: Edward Steichen, Donald McMaster, and C. E. Kenneth Mees—who not only has twice been given the Society’s highest award, the Progress Medal, but is one of the two Corresponding Secretaries from America.



PHOTOGRAPHIC SOCIETY excursion to Hampton Court, near London, in 1856. Standing, sixth top hat from right, the President, Chief Baron Pollock. At left, in uniform, the Secretary, Roger Fenton. Royal Photographic Society Collection.

### AN INTERNATIONAL CONFERENCE

THE Royal Photographic Society of Great Britain, in celebration of its Centenary, will hold an International Conference on the Science and Applications of Photography in London from Saturday, September 19th, 1953, to Friday, September 25th.

The Conference will cover many aspects of the science, technique and applications of photography and will be divided into sections dealing with:—

- I. Photographic Science (including theory of latent image and development, sensitization, sensitometry, resolving power, granularity, properties of photographic materials).
- II. Cinematography and Color Photography.
- III. Technique and Applications of Photography (including industrial radiography, photomicrography, spectroscopy, aerial photography, photogrammetry, high-speed photography, nuclear track recording, and other physical, chemical, and biological applications; photocopying; apparatus, processes, manipulations).
- IV. Photomechanical Processes.
- V. History, Literature (including abstracting and documentation) and Training in Photography.

All persons taking an interest in photography or its applications are cordially invited to attend the Conference. Details

will be sent on application to the Hon. Secretary, R.P.S. Centenary Conference, 16 Princes Gate, London, S.W. 7.

### THE PHOTOGRAPHIC JOURNAL

THE founders of the Photographic Society (subsequently called the Royal P. S.), realized at the outset that a permanent record should be made of the proceedings. Instead of restricting to members the circulation of some form of abstract of the proceedings, it was wisely decided to publish a periodical available to all. "The daily growing interest through every part of the world respecting Photography," the editors wrote, "the very great number of persons who came forward to join the Society the moment the intention was announced—the success of the recent exhibition of Talbotypes at the Society of Arts—the character of the correspondence already commenced, and the facility with which the *Journal* may be circulated through the post—have all combined to lead to the adoption of this form of publication."

Volume 1, Number 1 of the *Journal of the Photographic Society*, a pamphlet of sixteen pages, appeared on March 3, 1853. It was the first photographic magazine published in England. The Council of the Photographic Society underestimated the demand: the first printing of 2000 copies was insufficient, and the first number was twice reprinted. By the end of the year the circulation had increased to necessitate a print order of 4000—an unusually large edition for any specialized publication a hundred years ago.



The title was soon changed to *The Photographic Journal*. Throughout the years the periodical has grown in size and importance, so that today it is an indispensable record of photographic progress. Its pages have chronicled the most important developments, particularly in the scientific field, which now demands a separate, bi-monthly, supplement to the *Journal* proper.

The correspondence columns took on a special character in the early days of the *Photographic Journal*. Photography was then a difficult process, and there were few teachers. Most amateurs learned from manuals. They needed advice, and fairly deluged the editor with their letters. The George Eastman House has recently acquired, with a number of draft minutes of early meetings of the Society, some of this voluminous correspondence. Not all the questions were answered in the *Journal*, for the majority were not of sufficient general interest to warrant printing.

Even in those days, photographers were offered special developers! One luckless reader wrote:

TO THE EDITOR OF THE PHOTOGRAPHIC JOURNAL

1856 March 11th

Sir,

*I forward to you the enclosed that it may be seen how we Amateur Photographers are duped. I received it in return for 12 postage stamps verdantly sent by me, owing to an advertisement which appeared in your Journal stating it to be the best Positive Developing Solution yet discovered. Can you or your readers see any novelty or advantage in using a large portion of Acetic Acid instead of Glacial. The Community has been described by a not very bad judge of human nature as consisting of two classes, the Humbuggers and the Humbugged, and I think you will confer a benefit upon the latter by exposing all such impositions when brought to your notice.*

*I am, Sir,*

*Yours most obediently*

*One of the Humbugged*

**POSITIVE DEVELOPING SOLUTION.**

Take of Sulphate of Iron, two and a half drams; Distilled Water, ten ounces; Acetic Acid, (BEAUFOY'S,) not Glacial, one and a half ounce; Spirits of Wine, half an ounce; Pure Nitric Acid, five drops.

*Dissolve the Iron in the Water, then add the Acid and Spirit.*

DEVELOPER FORMULA which a reader of the *Photographic Journal* complained was not novel.



LADY EASTLAKE, author of the essay on photography quoted below. She was the wife of the first President of the Photographic Society. Calotype by D. O. Hill and R. Adamson, about 1845, George Eastman House Collection.

**A KIND OF REPUBLIC**

by Lady Mary Eastlake

*In the London Quarterly Review of April, 1857, appeared a long article on photography. Like the other contributions, it is not signed, but we know that it was written by Lady Mary Eastlake, the wife of the first President of the Photographic Society. It is a brilliant essay, and perhaps the first attempt to isolate the peculiar characteristics of photography. Although Lady Mary could not call photography an art, in the sense of painting or drawing, she recognized its power as "a new form of communication between man and man—neither letter, message, nor picture." We reprint—with some condensation—the paragraphs in the essay in which she appraises the Photographic Society and its position in the community.*

TENS of thousands are now practising a new pleasure, speaking a new language, and bound together by a new sympathy.

For it is one of the pleasant characteristics of this pursuit that it unites men of the most diverse lives, habits, and stations, so that whoever enters its ranks finds himself in a kind of republic, where he needs apparently but to be a pho-



tographer to be a brother. When before did any motive short of the stimulus of chance or the greed of gain unite in one uncertain and laborious quest the nobleman, the tradesman, the prince of royal blood, the innkeeper, the artist, the manservant, the general officer, the private soldier, the hard-worked member of every learned profession, the gentleman of leisure, the Cambridge wrangler, the man who bears some of the weightiest responsibilities of this country on his shoulder, and, though last, not least, the fair woman whom nothing but her own choice obliges to be more than the fine lady?

The records of the Photographic Society, established in 1853, are curiously illustrative of these incongruities. Its first chairman, in order to give the newly instituted body the support and recognition which art was supposed to owe it, was chosen expressly from the realms of art. Sir Charles Eastlake therefore occupied the chair for two years; at the end of which the society selected a successor quite as interested and efficient from a sphere of life only so far connected with art and science as being their very antipodes, namely, Sir Frederick Pollock, the Chief Baron of England. The next chairman may be a General fresh from the happy land where they photograph the year round; the fourth, for aught that can be urged to the contrary, the Archbishop of Canterbury. A clergyman of the Established Church has already been the editor to the journal of the society.

The very talk of these photographic members is unlike that of any other men, either of business or pleasure. Their style is made of the driest facts, the longest words, and the most high-flown rhapsodies. Slight improvements in processes, and slight variations in conclusions, are discussed as if they involved the welfare of mankind. They seek each other's sympathy, and they resent each other's interference, with an ardour of expression at variance with all the sobrieties of business, and the habits of reserves.

The photographic body can no longer be considered only a society, it is becoming "one of the institutions of the country." Branches from the parent tree are flourishing all over the United Kingdom. Liverpool assists Norwich, Norwich congratulates Dublin, Dublin fraternizes with the Birmingham and Midland Institute, London sympathizes with each, and all are looking with impatience to Manchester. Each of these societies elect their officers, open their exhibitions, and display the same encouraging medley of followers.

### AMATEUR ALBUMS

IT WAS a pleasant custom, when photography first became popular as a pastime, for amateurs to exchange prints from their best negatives. Occasionally each member would make as many prints as there were members. These were then assembled and bound, to make attractive albums. The George Eastman House has in its collection two of these rare albums.

*The Photographic Album for the Year 1857, being Contributions from the Members of the Photographic Club*, was published in London. It contains forty photographs, ranging from landscapes, portraits, genre and still life studies, to a bust of

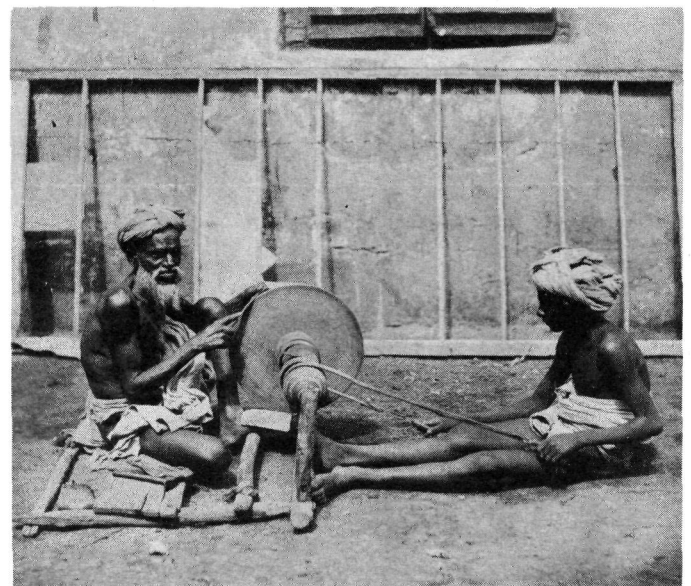
Queen Victoria. Facing each photograph is a page of letter-press: a poem or a quotation, and a detailed record of the technique employed which gives us a remarkable insight into the problems of the first amateurs.

*The Indian Amateurs' Photographic Album*, published by installments between 1856 and 1858, is of particular interest because many of the photographs in it record customs and costumes which even a hundred years ago were fast disappearing.

Camera clubs searching for a group project might well revive the annual album.



AMATEUR CALOTYPE, from an album in the George Eastman House, taken about 1845. The sitter is not known.



AMATEURS IN INDIA photographed the costumes and characters of the Indian people as early as 1856. This print by W. Johnson of a knife grinder and his assistant appeared in the Indian Amateurs' Photographic Album.



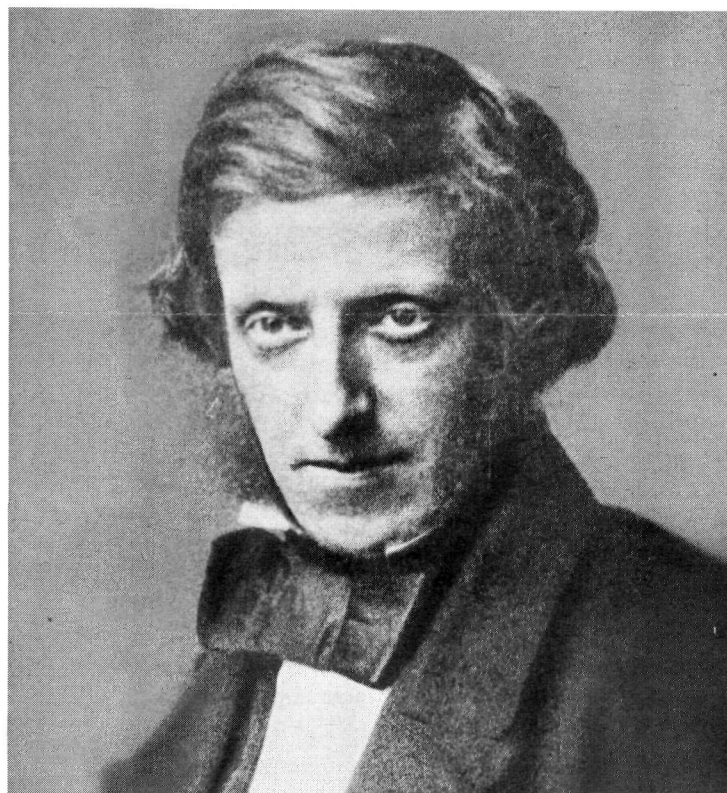
KENILWORTH CASTLE. A print from one of the first collodion negatives taken by Archer, in 1851. Royal Photographic Society Collection.

### FREDERICK SCOTT ARCHER

THE first honor which the Photographic Society bestowed was posthumous. At the death of Frederick Scott Archer in 1857, it made a contribution to a benefit fund for his widow.

Every member owed Archer a debt, for he had given them a technique which produced negatives on glass plates that were finer than the paper negatives of the calotype process and more useful than the direct positives of the daguerreotype process. Archer's collodion process, which he published freely in 1851, became for the next twenty-five years the standard method of making photography throughout the world.

Like so many inventors, Archer stumbled on the new technique. He was using glass plates sensitized with albumen and, despite the long exposures they required, he was satisfied with them—except that they were heavy, and a nuisance to lug on a photographic excursion. Archer thought he could use one piece of glass over and over by stripping the sensitive emulsion, after it was processed, from the glass and rolling it up on a glass rod. Collodion—a solution of guncotton in alcohol and ether—dries to make a skinlike film. Archer mixed a soluble halide with it, spread it on a plate, and plunged the plate in silver nitrate solution. The plate retained its light sensitivity as long as it was wet—and, unexpectedly—it had greater speed than anything known. This advantage so outweighed the ability to strip the emulsion from the glass, that Archer's reason for the invention was soon forgotten.



FREDERICK SCOTT ARCHER, inventor of the collodion process.

## THE HURTER AND DRIFFIELD ACTINOGRAPH

THE introduction of gelatin-bromide dry plates in the 1870s revolutionized the practice of photography. Not only was it possible to take snapshots with hand-held cameras, but photographers could buy ready-made plates. Unlike the wet plates, which for years had been standard, the new dry plates could be developed long after the exposures had been made. But it was difficult to judge the proper time of exposure. Nothing was more frustrating to the amateur than to discover only too late, under the red light of the darkroom, that negatives which had cost so much effort were useless because of under or over exposure.

Two English amateur photographers — Ferdinand Hurter and Vero C. Driffield—believed that some way could surely be found of overcoming this difficulty. Trained scientists, they began to devise a technique for calculating the proper exposure mathematically. Four factors were involved: the strength of the light, the light-sensitivity of the plate, light-passing power of the lens, and the speed of the shutter. After much experimentation they devised an ingenious slide rule to equate these factors. It was patented in 1888 as the Actinograph.

For years they had been measuring the strength of daylight with an instrument of their own design, the Actinometer. They found that—within five major groupings which they designated “Very bright,” “Bright,” “Mean,” “Dull,” and “Very dull,” there was a uniform amount of light for every hour of the day and every day of the year. The mean average of these light levels they drew on a graph, which showed the month and day along the side, and the hours as eight curved lines. This graph they glued to a freely revolving cylinder.

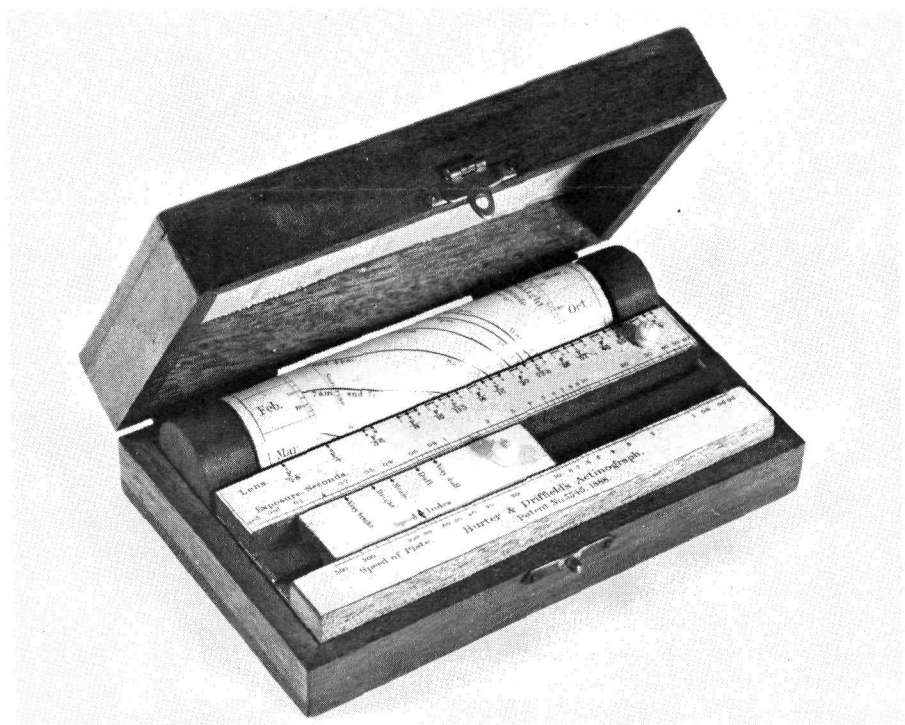
The speed of the plate—its light sensitivity—they calculated by making test exposures of a landscape. The amount of silver

deposited on the plate after development and fixing they measured with an instrument called the “densitometer.” They found that a negative which gave a good print of a landscape showed a difference in density of 1 to 1.7 between the grass and the sky, and this they used as a standard. Plates on the market were graded numerically, from Slow (2 to 6) to Rapid (25 to 50). They put these numbers on a fixed scale at the front of the instrument. Above it they arranged two sliding scales. One was marked at the bottom with an index point to be put opposite the speed, and at the top with five marks, for each lighting group from “Very dull” to “Very bright.” A second sliding scale was marked at the bottom in seconds, from 1/20 to 60, and at the top with lens settings, from F/2.8 to F/64.

To use the Actinograph, the speed index was first set opposite the plate number. Then the cylindrical scale was revolved until the date showed opposite the edge of the upper rule. The stop number of the lens was set against one of the curved lines representing the hour. The exposure was then read opposite the appropriate lighting group, which the photographer could easily guess at.

With an Actinograph in the George Eastman House we can put ourselves in the position of an 1890 amateur. With a Rapid plate, on a bright day in June at 3 P.M., we would set the lens at 1/12 sec. at F/8. (Today’s film is so much more rapid that the same subject could be taken in 1/200 sec. at the same stop.)

The Actinograph was sold with scales for every latitude, and even in a French edition. Hurter and Driffield continued their work on a more scientific basis, and in 1890 published a study which has become classic: the mathematical relationship between the light sensitivity of photographic emulsions, exposure, density and development.



ACTINOGRAPH, for the estimation of correct exposure, patented in 1888 by Hurter and Driffield. George Eastman House Collection.



## A BARRYMORE GALLERY

ALTHOUGH most actors traditionally scorned moving pictures at the turn of the century, it is hard to find any stage personality of reputation who did not yield to the temptation to act before the camera.

Eleanore Duse, Rejane, Minnie Maddern Fiske, Joseph Jefferson, Coquelin and Sarah Bernhardt appeared in antique films. Forbes-Robertson, E. H. Sothorn, Ellen Terry and Henry Irving tested their skill in pantomime for the silent pictures.

Of the "Royal Family," only John Drew held out against the outrageous flickers. Lionel Barrymore started his film career at the end of 1911; brother John followed in 1913, and Ethel's debut was made in 1915 in a scenario specially written for her by Augustus Thomas.

A brief, but highly informative and splendidly appreciative account of John Barrymore's film career by Spencer M. Berger appears in the December, 1952, issue of *Films in Review*.

Mr. Berger reproduces twenty-three photographs. They are but little less fascinating than his text. For years he has been collecting stills, reviews, and data pertaining to the theatrical and cinematic lives of all the Barrymores. To this task he has brought the combined skill of a trained scholar, and the dedication of a collector. Even more fortunately, Mr. Berger shows himself in his article to command a style so engaging, an understanding so articulate of John Barrymore's tragic life, than one can only hope he will one day enrich the knowledge of all who are curious about this history of both film and theatre with a definitive book tracing the almost legendary activities of the colorful Barrymore theatrical dynasty.

*Films in Review* is the monthly publication of the National Board of Review. It has recently been revitalized by editor Henry Hart, and is now illustrated with generous abandon. To its pages Carl-Th. Dryer, Josef Von Sternberg, historian Theodore Huff and Herman Weinberg contribute. The magazine manages to be at once historically useful and highly entertaining.

Mr. Berger's contribution serves to remind us that artists in front of the motion picture camera had as much—sometimes a little more—to do with the history of motion pictures than the too-often uninspired gentlemen whose job it was to direct them.

## THE TECHNOLOGY OF PHOTOGRAPHY

*Photography, Its Material and Processes*, by C. B. Neblette. Fifth Edition. D. Van Nostrand Company, Inc. New York, 1952. 500 pp. \$10.

Over the years C. B. Neblette's textbook on photography, first published in 1927, has become a standard. It now appears

as a fifth edition. Despite this qualification, however, the text has been so thoroughly rewritten that the book should be considered entirely new.

It is no longer a general handbook on the practice of photography, but a treatise on its technological aspects, written with the collaboration of fourteen experts. In his preface Mr. Neblette—who is head of the Department of Photographic Technology at the Rochester Institute of Technology—explains that "there now seems to be a growing realization of the need of an understanding of photographic technology even in a course whose objective is essentially practical picture taking. This edition, therefore, concerns itself with the materials and processes of photography and less with its practice than previous editions."

The result is a volume loaded with information which cannot readily be found elsewhere, and which will be of constant reference value. It is a learned book, written not for the layman or the amateur, but for the advanced expert who wants to grapple with the very fundamentals of the photographic process and has enough scientific background to do it.

The thirty-three chapters, eighteen of which were written by specialists, cover practically every aspect of the photographic process.

In addition to discussions on light (including an excellent section on electronic flash), optics, the theory of the photographic image, photochemistry, sensitometry, and color photography, there is a section on the problems of reproducing photographs by graphic arts techniques. Most text books have overlooked the close relation between the photographic and the photomechanical processes.

One of the most unusual chapters, written by J. M. Calhoun, deals with the manufacture of photo-sensitive materials. There is very little information in print on this subject, which has largely been kept within the industry.

Because of its often unusual content, its authoritative text, and its impressive detail, this latest edition of Neblette is even more valuable than its predecessors.

The new editorial direction has necessitated the omission of a great deal of material which distinguished the earlier editions. Mr. Neblette's historical chapters have been left out of the 1952 publication. This is a disappointment, for they formed one of the best technical histories of photography, and served to introduce the subject to countless students in the past.

*The columns of IMAGE are open to all who are interested in tracing the development of photography. Unsigned articles which appear in these pages may be reprinted providing that credit is given the George Eastman House.*

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