Paul Pretsch, Photogalvanography and Photographic Art Treasures

By Paul William Morgan

Part I

Paul Pretsch and photogalvography are names which do not always raise a smile of recognition. Pretsch was the man who launched in London the first commercial attempt to print photographs. His Photo-Galvano-Graphic Company was short-lived, but the career of this inventor was a full one. It encompassed much more than can be gleaned from the brief, sometimes contradictory, facts mentioned in photographic histories.

The Pretschs were a Viennese family. Paul, though his father Johann was a goldsmith, was apprenticed between 1822-7 to the master book printer Anton von Haykult. After his father's death in 1831, Paul began some impressive foreign journeyings. He headed off from Vienna to Munich, then ever westwards, through Augsburg, Ulm, Stuttgart and Karlsruhe. He worked up the Rhine as far as Cologne, swung off through the Low Countries, with spells in Brussels and Amsterdam, before returning to Vienna in 1839. Having acquired much broad work experience, as well as linguistic skills, he excelled at proof reading, learnt electrotyping, and edited a newspaper. In 1841 he began another foreign sojourn, spending two years managing a Rumanian printing business in Iasi. Upon returning to his home town, he settled to regular employment with the Government Printing Office.

The Director of this establishment was Alois Auer, who is particularly remembered for galvanoplastic Nature Prints. Auer encouraged Pretsch, and appointed him foreman and manager of the photographic department. All was not well in their working relationship, as Henry Bradgury was to reveal. He was an apprentice of Pretsch, and son of the founder of punch proprietors Bradbury and Evans. Henry went on to publish a seminal work on Banknote Engraving. His book was dedicated to Auer, but comntained allegations that the Director had selfishly and unfairly aggrandised himself, in claiming credit for work which had actually been done by Pretsch. This can be seen as a precedent for the sort of difficulty Pretsch was to suffer throughout his career.

Pretsch by the end of the '40s produced large and lauded photographs of Vienna and other Austrian cities, and had become an expert on printed monetary forgeries. In this capacity he travelled away again, for cases brought in Paris and London. His contacts with the burgeoning photographic scene in England were furthered when he returned to London, having been put in charge of the Austrian department at the Great Exhibition of 1851.

He stayed nine months, but returned to Vienna and his own researches. He had already been involved with line blocks and using light-sensitive chemicals for use with intaglio printing. He went on to concentrate on a method for the printing of photographs. The earliest photographs in only a decade had revealed worrying problems. Even in the most careful storage, images were discolouring, fading, and sometimes disappearing altogether. If photographs could be produced in an ink format, that would solve the deterioration problems. If they could be copied at

will, they could be easily – and he hoped lucratively – be utilised for illustrative purposes.

Pretsch's solution was photogalvanography. This process is succinctly described by Waterhouse as 'obtaining galvanoplastic reliefs by the swelling of insolated chromated gelatine films'. It was an involved and lengthy process, but in Vienna, having reached a stage where he felt his invention was pracxticable, he resigned from his post in order to found a business in England.

Pretsch was registered as a photographer in Sydenham when he lodged his Patent No. 2373 in November of 1854. This was for 'improvements in producing copper and other plates for printing'. The following year, having moved on to Islington, he was granted Patent No.1824, which extended the process to 'the formation of cylinders to be employed in calico and similar printing, embossing, or other purposes'. During that year he was employed, and did some initial work with the printing firms of Letts and Sons, then at Kronheim and Co. He was also using his contacts to get backing for his own plans.

Premises were obtained in Holloway, and by February 1856, Photographic Notes started to reveal some details of the Photogalvanographic Company which Pretsch established. The Editor, Thomas Sutton, was suitably impressed, but, as on most subjects, keen to add his own suggestions,. He complained that some photogalvanographs appeared to have been taken from inferior photographs. Pretsch requested some Sutton images to process, but Sutton protested that his own would be entirely unfit for that purpose. He disapproved of prints being produced from printed paper positives anyway, believing that Daguerrotype polished metal images were finer, compared with which the paper positive 'becomes little better than so much paper spoiled. He gave lopte of hints of how the Company should proceed, down to what coloured ink or kind of paper would be best. He also gave early warning of possible opposition to Pretsch, with the implication that the English might not take too kindly to foreigners coming over to profit from such an important process.

Pretsch might not have taken much notice of others telling him how to run his business, but he had already considered the matter of Daguerrotypes. They certainly gave a distinctive image, but the problem was they were essentially one-offs. They could not be reproduced in the same way a positive/negative system might be. Pretsch came up with another of his inventions, for spray-etching the daguerreotype plates. It was a method later to be utilised in etching machines.

Meanwhile, Pretsch explained his invention to photographic society meetings, and the first details in the Press revealed a process which required skilful manipulation, besides being capable of variations to the basic formula and in subsequent operation. The Company, founded to implement Pretsch's invention, would produce copper plates. It was not a printing firm in itself, although it would release to the public some unique specimens. 'From time to time', was the phrase used about the prints to be released, which was to prove apposite. The imparter of this information was one Duncan Campbell Dallas, already appointed Manager of the new Co. He very soon turned to inflicting inestimable damage on Pretsch.

The foundation of a company had initially gone well. One of the first professionals to be impressed by Pretsch's work was Roger Fenton. His name alone

would have been worth a great deal, for he was at the height of his fame from the Crimea and Royal commissions. He was to stick by Pretsch throughout the troubled years to come. Probably through Fenton's contacts in the North West came a group of financial backers. These business associates were also respected names, the group comprising James Carlton and George Walker, from the Manchester firm of Carlton and Walker; Charles Watson, John Robinson, and John Swainson the Younger, men from Bolton and Preston.

Fenton was naturally in charge of photography, but as a manager, Dallas was appointed. These men together became partners in the Photogalvanographic Company. Pretsch hadn't cared to put his own name to the process, and it seems likely that it was Dallas who settled on this sonorous but unwieldy name. Dallas certainly was later to claim responsibility for bringing in the company backers, but this, like many of his assertions, is dubious.

Through 1856 hints about photogalvanography and praise from various commentators, created an appetite. The public frustratingly remained hungry as the months went by, for the Company still seemed reluctant to release any fruits of its labour. What was not generally known was that behind the scenes there was an irreconcilable split in the fledgling business. Pretsch, like most inventors, did not give away secrets easily, but Dallas of course had to be instructed how to work the patented process. In the course of operations, Dallas had quickly fallen out with his partners, and by the summer he had the effrontery to try to patent his own version of the formula. He provisionally applied (No.1344, on June 5th), for what he stated to be 'Improvements' applicable to photogalvanography, although he was then unable to take his version forward to full Patent protection.

Dallas's position in the Company was untenable, and the other partners were forced into measures to get rid of 'that fellow', as they exasperatedly referred to him. Dallas was offered terms to retire, but he refused them. A Bill in Chancery was the only way out of the dilemma, but in the meantime, the Company could not operate, and was financially crippled before it could even start recouping expenses. Judgement eventually went against Dallas; it was ruled the other partners were entitled to force him out, but there was disapproval of his treatment, so the firm had to pay their own costs, and a portion of his. It took until February 1857 for the partnership to be dissolved. The Company property had to be sold off, and a new slimmed down partnership of Pretsch, Fenton, and Carlton prepared to fight on.

They had in the interim appointed a new manager, William Bosley. Amazingly, in the midst of this turmoil he had managed to push production forward, and get the first folios out on the streets. Photographic Art Treasures was planned as a series of monthly editions, each part containing four photogalvanographed prints. The Company naturally hoped to become a profitable business, but it had a higher purpose. The 'New Era in Art', as it was proclaimed, wanted to enable ordinary people for the first time to see and have in their own homes reproductions of great works. Part I had emerged in November of '56, Part II in January 1857, but thereon slowed to a more realistic rate of every alternate month.

Fenton provided the bulk of the prints, but he did engage other notable photographers – Lake Price, Reilander, Cundall and Howlett, Henry White, Lebbin Colls, R.F.Barnes. Besides printing their photographs, there were copies of engravings

and famous paintings. Reactions to photogalvanography varied, from ecstatic praise to grumbling complaints. Partly these new prints added to the debate over whether photographs were Art or Science. Could they be compared to painted masterpieces, or were they mere chemical manipulation? In the case of Pretsch's process, there were added concerns over the use of re-touching. Perfect photographs could produce perfect plates, but there was hot debate over how much some of the prints had to be assisted by further work. Any extra engraving added to the lengthy process (of about six weeks), and, of course the cost. Photographic Art Treasures were never cheap (retailing for mid-range Proof Editions at 7/6). Extra prints and stereographs on offer were also slow to reach fruition, and altogether sales were disappointing. They did achieve for the first time half tones in print, and they were indeed permanent, as opposed to often deteriorating photographs. However, accumulating problems added to the initial difficulties, and by Part V that summer, production ceased.

Pretsch's woes had been added to in 1857 with another legal wrangle, this one initiated by the ever-litigious Fox Talbot. It was claimed part of Pretsch's method infringed Talbot's own Patent of 1852. Eventually, Pretsch was unable to further contest the action as the Company went bust with debts of about £4,000. At some point during that year he seemed to have travelled back to Vienna, working on a series of large format views of the townscape, which together made up a 360 degree panorama. He did however continue to reside in London, and to improve his processes.

Pretsch tried without success (as did Swan and Woodbury) to adapt photogravure to cylindrical presses, but mainly concentrated on the lithographic stone application of his processes. In this guise he collaborated with De la Rue on some cartographic and scenic prints. Pretsch had by then become an agent for Petzval lenses in the United kingdom. He found himself drawn into another long-running controversy, having to defend Petzval claims against the rival Voighlander lenses. There was also irritation from Poitevin. Pretsch, along with Poitevin and Negre, had been considered the main contenders for the Duc de Luynes prize, a long running competition to find the most improved printing method. The three of them had been applauded for their efforts, but there were claims that Poitevin was the originator of a process. Pretsch was able to prove he had first revealed it prior to Poitevin's application. This didn't stop Poitevin having the last laugh, when it was he was the eventually recipient in 1859 of the large monetary prize.

Pretsch was badly in need of such funds. It was said the poor man would go without his breakfast in order to purchase more supplies for his experiments. He'd been harried again by Fox Talbot, whom was attempting to control all photographic processes. The Liverpool and Manchester Photographic Journal had enthused over the economies of the lithographic Pretsch method, which was capable of producing 100,000 copies from one photograph. However, in providing the readership with a specimen, Talbot threatened action to the point where the Editor thought it wisest to back down. In a humiliating concession, fees had to be paid according to the size of the reproduction.

Pretsch by 1860 lacked even a hundred pounds to renew his Patent, and the stage was set for another debilitating battle. Duncan Dallas saw his opportunity, and by 1863 was touting his own version of photogalvanography. Gernsheim's

opinion was that Talbot's interference was a nuisance, but Dallas caused far more damage. Dallas was reluctant to provide the details to of his 'new' method, claiming he needed to keep secrets in order to profit from them. According to Eder, it was because he was fraudulently appropriating Pretsch's original specifications. Dallas did make minor changes enough to establish his own patent in 1866, and in 1869 set up his own Company. By 1875 he was admitting he intended to retire from business. He was reduced to attempting to sell the right to use his method to subscribers for £50, an offer which was not received with general enthusiasm. What he did do was inflict lasting harm, and ensure it was his own name lived on in the Dallastype, unlike the luckless Pretsch.

Pretsch soldiered on through the difficult years. He had a contract with the British Museum for illustrating their exhibits. He continued to exhibit his own work, and receive awards. Even there he could complain about his treatment, for instance in 1862 {when Fenton was retiring disillusioned from the photographic scene) Pretsch protested that he was being wrongly rewarded with a medal for photographic printing, when it fact it was photographic engraving which was his concern. He could well feel he had not succeeded in getting his ideas over. There continued to be odd mentions of his foreignness, all perhaps part of the intense disputes over who and where original inventions had been made. He was an advocate for the International Exhibition of photographs. He was also suffering in his health, and understandably from the Dallas provocation. In 1863 gave up his English operations, and returned to home territory. A sad mention is made in 1864 of some of the best plates being sold off as old copper.

Most accounts of Pretsch would have it that he was so beaten down and impoverished that was the end of him, but this was not so. He returned to employment at the Imperial Printing Works. He toiled on attempting to improve photogalvanography, and in '65 was granted a subsidy by the Austrian government. The following year he sealed a new Patent there. His multi-lingual proofreading skills were still in demand, but his finances certainly did not improve. There must still have been sympathy for him in England, for in 1866 there was some attempt to raise a subscription on his behalf in England, but without significant benefit. He might have thought he had left controversy behind when he quit this country, but this was not to be. Others were working on their own formulae, and the announcement of Robert Courtenay's Patent in 1869 led Dallas to launch a bitter campaign in the Press. He sneered at Courtenay's invention as mere photogalvanography redivivus, but took the opportunity to renew his attack on Pretsch. Obviously still bitter over his expulsion from the Company, Dallas denied Pretsch was even an inventor, and again raised the spectre of foreignness. He implied in this case that people had paid Pretsch too much attention, just because he designated himself 'Herr' rather than plain 'Mr'. Fourteen year after expelling Dallas from the Company, Pretsch was forced to defend his process, and pointed out there were then half a dozen other similar patents. He repeated his conviction that good impressions were possible from good originals, and invited anyone to come to Vienna where they could see some of his untouched specimens.

The fuss subsided, and Pretsch faded from the limelight. In Vienna, he kept going for a few more years, until finally succumbing to cholera in 1873. He

rated only a few lines of obituary in the journals which had once devoted so many columns to photogalvanographic developments. His efforts didn't die with him, for his former pupil Joseph Leipold went on to publish more advances in the process. His standing in Austria at least remained high, with medals struck in his honour in 1897. Internationally, it was a century after his work in England that he achieved perhaps the height of his fame. In 1965 he was named as one of the 105 greatest contributors to the technical development and progress of photography.

As we have seen, Paul Pretsch worked for years to establish the credentials of photogalvanography. It was Pretsch who made the first steps towards mass photographic printing. His Photographic Art Treasures series moved Thomas Sutton to point out, that absence of commercial success does not invalidate the intrinsic excellence of a process. Overall, as Waterhouse suggests, Pretsch perhaps deserved fuller recognition and reward.

#### Part II

The 'Photo-Galvano-Graphic Company'. What was it? Here's an introductory description from 1856. 'A Company has been started in Holloway, for the purpose of carrying out a new patent... Operations will be conducted under the management of Mr. Pretsch... The process consists in the engraving of a copper-plate on which a positive photograph is superimposed, by means of the joint action of light and electricity. From the plate so engraved copies may be printed in the usual manner...' (1).

The Company in fact represents the birth of an industry. With a folio series entitled Photographic Art Treasures it launched the first commercial attempt to print photographs. At a time when it was feared early photographs were deteriorating and might disappear altogether, photogalvanography offered impermeable copies, intended for mass production. The Photogalvanographic Company was before long bankrupted. It is routinely written off as a failure, and usually only acknowledged for printing the first successful half tones. A study of its work, however, uncovers an intriguing struggle to overcome the complex problems inherent in new technology.

The inventor of photogalvanography was Paul Pretsch. He left his native Vienna for London, and was granted Patents in 1854 and 1855 (2). He enlisted the most famous photographer of the day, Roger Fenton, and with financial backing established his Company. A year later, the first issue of Photographic Art Treasures was released. The reception was encouraging. The Trade and everyone who had seen the photogalvanographs were reportedly 'perfectly crazy with astonishment and delight' (3).

The short existence of this ground-breaking Company, and the perseverance of Pretsch through many tribulations, can be followed in the Press of the time. The photogalvanographic prints which remain are an obvious way to focus on Company achievements, but the covers which folded around those prints are in themselves revelatory. They offer a remarkable opportunity to see how the Company presented itself. We can, just as the 1850s public would have done, come to our own interpretations. I feel that the covers are a valuable, and neglected, research tool.

They offer a mid-nineteenth century insight to add to our necessarily modern perspective.

I would like to reveal what messages the covers convey about this technological development of photography. Within this essay, the illustrations of cover pages will give an idea of the variety in type, font, and style, of the printing. In the text I have copied original punctuation and spelling, but confined myself to the use of upper-case and italics to mirror the printing emphasis.

What then, did the public see, when Photographic Art Treasures were unveiled? We are faced with a large (15 x 22 inches) buff coloured folder, which contains four white pages of the same size, each page bearing one tipped-in print. Centrally, and printed directly onto this first front cover, is an example of a photogalvanograph. It is presented within a slightly raised border, and measures approximately  $7\frac{1}{4}$  x  $5\frac{1}{2}$  inches. In this case, it portrays a Church porch, un-named. Above and below the picture are two blocks of printing. Top left, we see 'PART I', and 'TO BE CONTINUED MONTHLY'. Middle, top, is 'A NEW ERA IN ART', and top right, 'FOUR PLATES IN EACH PART'. The price is there, in the particular set of prints which I have mainly used, of 'PROOFS, 7s. 6d.'. Proofs were middle of the range prints in price and quality.

The following lines read 'PATENT PHOTO-GALVANO-GRAPHIC PROCESS', supplemented by 'STAMPED IN NATURE'S MOULD'. Then comes the series title, 'PHOTOGRAPHIC ART TREASURES', with a snappy alternative, 'OR, NATURE AND ART ILLUSTRATED BY ART AND NATURE'. An explanation follows: 'BY THIS NEW AND BEAUTIFUL ART OF ENGRAVING, THE UNCERTAINTY OF COLOUR AND LIABILITY TO FADE, SO OBJECTIONABLE IN PHOTOGRAPHS, IS OBVIATED, WHILE THE DETAIL AND TOUCH OF NATURE IS FAITHFULLY PRESERVED'.

The lower printing begins with 'A miscellaneous Selection of Subjects from Choice Photographic and other Originals by the Most Eminent Photographers.' The contents are laid out, with 'PART I. CONTAINS' turning out to be solely Roger Fenton's work – 'YORK MINSTER', 'CEDARS, Monmouthshire', and two views of 'RAGLAN CASTLE', (The porch, and Watergate). Alongside that, is 'PART II. WILL CONTAIN': 'HAMPTON COURT', and 'HELMSLEY CASTLE, Yorkshire' (both by Fenton); 'VIEW ON THE THAMES' by (the first mention of another photographer) R.F.Barnes; and 'HANGMAN'S BRIDGE, Nurenberg', (uncredited).

Below these comes 'LONDON: PUBLISHED BY THE PATENT PHOTO-GALVANO-GRAPHIC COMPANY, HOLLOWAY PLACE, HOLLOWAY ROAD, ISLINGTON', and 'NOVEMBER, 1856'. Grandly, it asserts 'ORDERS RECEIVED BY ALL PRINTSELLERS AND PHOTOGRAPHIC AGENTS.' The page ends with 'INVENTOR-HERR PRETSCH', 'RES. PHOTOGRAPHER - ROGER FENTON, Esq. B.A.' and 'PRINTED BY COX (BROS.) AND WYMAN, GREAT QUEEN STREET, LINCOLN'S-INN FIELDS.'

The outside of the back cover advertises more prints which the company informs us are 'IN PREPARATION'. A dozen subjects are named, such as 'FOUNTAINS ABBEY', 'RIVAULX ABBEY', 'MIDDLEHAM CASTLE', and 'YORK, from Lendall Ferry'. 'REDBROOK, on the Wye' is listed by Fenton, as well

as his 'SUDDEN THOUGHT'. W. Lake Price is now the only other photographer mentioned, for 'DON QUIXOTE'. Other titles given are 'THE CRADLE-Sleeping Infant', 'ARTS AND ARMS - Crimean portraits', 'GIRLISH MEDITATION', and 'UNCONSCIOUS BEAUTY', which is 'After Le Jeune', plus 'A NUMEROUS COLLECTION OF OTHER SUBJECTS.'

There is another attraction promised: 'A Succession of Novelties in Stereoscopic Subjects will be constantly issued by the PHOTO-GALVANO-GRAPHIC COMPANY, at prices which will readily enable every Household in the Kingdom to avail themselves of the Amusement and Instruction afforded by that beautiful invention the STEREOSCOPE'. Slides would be mounted 'COMPLETE FROM 3s 6d. PER DOZ., PLAIN; COLOURED, FROM 7s PER DOZ., AND UPWARDS'. In addition, 'AN INTERESTING AND NOVEL GIFT FOR THE ENSUING CHRISTMAS WILL BE THE STEREOSCOPIC PICTURE ALBUM: Containing a Choice Selection of Fifty Subjects, in Elegant Cover, price 21s.'

The Company projects yet more series, 'Preliminary Proposals' will 'shortly' be issued: 'The Cathedral Antiquities of the British Empire'. 'The Plates', it continues, 'from exquisite Photographic Originals' are to be 'Engraved by the Company's Patent Process on a scale of Magnificence hitherto unattempted, and indeed impossible by the ordinary methods of Engraving.' Additionally there would be 'GREAT REMAINS OF OLD ABBEYS, EXISTING IN THE NINETEENTH CENTURY, with Picturesque NOOKS AND CORNERS in their Vicinity'. There is an appeal for more work: 'ORDERS SOLICITED-SPECIMENS FORWARDED-ESTIMATES GIVEN FOR EVERY DESCRIPTION OF WORK'. At the bottom of the page comes 'All Communications to be Addressed to the Company's General Manager'. Both inner sides of the back and front cover are, in this first issue, left blank.

What can be gleaned from the appearance of Photographic Art Treasures? On the front cover, the Company emphasised how important this development was, giving prominence to its virtues, - the print size, permanence, and faithfulness to Nature - as well as a couple of tag lines to help make it memorable. The Church porch image immediately demonstrated that photogalvanography could deliver a detailed print from a photographic original. The inner sides of the covers being blank looked stylish, and did not denote an early lack of production, for much was already offered. In total, there were the folios themselves, two further series (Abbeys and Cathedrals), plus the succession of albums of 50 stereoscopic slides at a time. The overall impression was of a well presented product, with strong credentials. If Herr Pretsch wasn't an immediate draw, Roger Fenton being Resident Photographer was a guarantee of quality.

The Company was enterprising to jump on the growing Christmas market, though the Stereoscopic Picture Album, priced at a guinea, would not have found its way into the average stocking. The Proof editions of Photographic Art Treasures, at 7s. 6d, were not cheap either, and it would seem rather unrealistic to state that even the cheapest stereoscopic slides, at 3s. 6d., would have been afforded by 'every household in the Kingdom'.

The Holloway business, after a protracted genesis, was intent on establishing itself. It was trying to recruit Agents in its initial adverts (4) and touting

for business on its folios. It must have been confident that it could handle a multitude of projects. It makes its mark as an innovatory firm which was now in a position to continue delivering impressive results.

Not quite so impressive, when December failed to see any issue of the follow—up Part II. It transpires that neglecting to name the Manager on the Part I was significant. Behind the scenes, the Company had throughout 1856 been mired in expensive proceedings to get rid of its first manager, Duncan Dallas. After falling out with Pretsch, Dallas had attempted to lodge his own Patent (5). By December the Company was still in the throes of being reformed, without some of the original partners. Delays were perhaps excusable, and it is something of a wonder that by the beginning of January the next folios could be put on sale.

Printed front top of the new cover was still the assurance that folios would continue monthly. The central picture on the front page is now named underneath as 'THE PORCH OF ST. LAURENT'S CHURCH, NURENBERG', 'Published by the Photogalvanographic Company, London, January 1, 1857'. Covers for the top quality Choice Proofs were apparently differentiated by bearing a picture of an equestrian statuette.

A listing of 'PART I. CONTAINS' is retained; presumably the November issue could still be purchased. Part II's listed contents, however, have changed. Since the list was published in Part I, three of the expected prints are not included. Only Fenton's 'HAMPTON COURT, (here with 'on the Thames' added) remains, and it now is placed at the end of the foursome. R.F. Barnes, the new photographer who should have featured, did not make it into this issue. Instead, several of the trumpeted 'eminent photographers' take their bow. William Lake Price has 'DON QUIXOTE IN HIS STUDY', along with Cundall and Howlett's 'CRIMEAN BRAVES'. Lebbin Colls has his 'LYNMOUTH, Devon'.

Already can be discerned some print lines have been changed from Part I covers. At the bottom of the front page: 'WHOLESALE AGENTS TO THE PHOTO-GALVANO-GRAPHIC Company' has replaced the 'Orders received by all Printsellers and Photographic Agents'. Now there are dedicated agents in London – 'Messrs. LLOYD (BROs.) & CO., 22, LUDGATE HILL, and 96, GRACECHURCH STREET'. Finally, Roger Fenton was described, not as previously, 'Res. Photographer', but 'PHOTR. TO THE COMPY.'. Was he not resident anymore? He was still a Partner, so perhaps Fenton was stepping back to his other projects, after the agonised establishment of the Company.

Inside the covers, the front remains blank in Part II, but the inside back has been filled with another welter of choices. The font styles and sizes and strengths continue to blossom, so each separate bite of information is presented in an attention-grabbing way. An astonishing array of alternative products was led by 'The Cathedral Antiquities of the British Empire'. They are still at the stage of 'The Company will shortly issue Preliminary Proposals'. The 'GREAT REMAINS OF OLD ABBEYS' are mentioned again, with no new comment. A further collection has now been complied, all from William Lake Price photographs; 'A SERIES OF SIX ORIGINAL HISTORICAL FIGURE COMPOSITIONS, EXECUTED FROM THE LIFE'. There were only three specified, 'DON QUIXOTE IN HIS STUDY', 'THE SOLDIER'S TOAST', and 'THE OLD COVENANTER'. They had the same price range as the

folio pictures, of 'Choice Proofs, 10s. 6d., Proofs, 7s. 6d.', and 'Prints, 5s. each'. These 'Will shortly be Published, and may be had separately'.

The proposals continue: 'NUMEROUS DOMESTIC SUBJECTS ARE IN PROGRESS'. They would be 'SUITABLE FOR THE PALACE OR THE COTTAGE, WITH A VIEW OF ASSISTING THE GROWING TASTE FOR THE TRUE AND BEAUTIFUL IN ART'. These subjects are unpriced, but would be 'PUBLISHED SEPERATELY, COLOURED OR PLAIN'. Colouration would have meant more treatment, and therefore more time and cost.

The inner back cover ends by listing a variety of 'Subjects' which 'will shortly be ready'. There is a condition for these: 'Early Application is requisite to secure Proofs.' Is this attempting to get definite orders before being committed to the expense of production? It could also mean a scarcity of prints for sale. Specific prints which are offered are: 'BEDTIME- - A Family Group. After an Original photograph from the Life'. This Fenton effort is accorded the highest prices – 'Proofs, 7s. 6d., Prints, 3s. 6d., and Coloured, 7s.' each. 'A PAIR', has been put together 'After Original Paintings by Mrs. Anderson', 'LIKE SISTER LIZZIE' and 'NO WALK TODAY', which are slightly cheaper, at the corresponding prices of 5s., 2s. 6d., and 5s. These types of Art reproduction are often unjustly maligned. At the time, they were an important part of the drive to bring hitherto unseen works to a wider public. Both the above prints would be featured within Photographic Art Treasures. The cheapest productions advertised were then 'A.B.C., or the Mother's First Lesson' (uncredited), at 3s.6d, 2s., and 3s.; and another pair in the same price band, 'After Nature', from Lebbin Colls, quaintly entitled 'PET WITH SOCK' and 'PET WITHOUT SOCK'.

The outer back cover of Part II starts by listing prints which were 'IN PREPARATION'. There are several which have featured earlier, and are from Fenton's touring trips. O.G.Reilander joined the eminent ranks, with 'OLD MOTHER GOOSE' and 'BARNABY HAPPY'. R.F.Barnes returns to the reckoning with his 'WINDSOR CASTLE,-Entrance', 'THE HORSE GUARDS, Whitehall', and 'RICHMOND ON THE THAMES' (which could well be a re-titling of his 'View on the Thames'). A picture credited to Howlett (no Cundall) is 'CRIMEAN CONVALESCENT', and there is another newcomer, H.B.Lee, with 'A DRINK AFTER A BITE'. A copy of a painting, 'CATTLE. After SYDNEY COOPER' would be available, plus the 'NUMEROUS COLLECTION OF OTHER SUBJECTS.'

The Stereoscopic Varieties has evolved. The 'FIFTY CHOICE PICTURES' now 'Shortly will be issued', (as opposed to 'Constantly'). They are seemingly what had previously been offered as the 'interesting and novel' Christmas gift. They are here explained as 'By ROGER FENTON. Taken during a Summer Tour in 1856'. An editorial flourish adds: 'Also a Selection of Exquisite Stereoscopic Morceaux, by O.G.Reilander.'

Another Fenton series compiled from his tours is now mentioned. 'BOLTON ABBEY, AND THE ADMIRED AND PICTURESQUE SCENERY IN ITS VICINITY. Photographed from Nature'. This would consist of 'Ten Subjects of the most surpassing loveliness. Published in Cloth Cover, lettered'. It would be priced between two and five guineas for the set, but not yet, for 'The Company have arranged for the Publication of the Charming Series of Views' is the qualification.

There is a policy declaration: 'THREE CLASSES OF IMPRESSIONS OF THE COMPANY'S PUBLICATIONS WILL INVARIABLY BE ISSUED – CHOICE PROOFS: PROOFS: PRINTS. The Company guarantee that their issues of Choice Proofs shall be limited to the number announced.' There is also an elaboration of the process description provided on Part I's front cover, with added emphasis on its advantages: 'Drawn by Light and Engraved on Copper, the Plates are Printed in the ordinary Copper-Plate Printing-Press, with PRINTER'S INK AND PAPER. These materials have stood the test of time for upwards of Four Centuries'.

How was the Press of the time reacting to the series? The majority of comments were favourable. Photographic Notes had hailed its arrival as 'a memorable day in the history of Graphic Art'. The results were 'admirable', and there was evidence of 'the capabilities and vast utilities of the invention (3). Approval was tempered by a debate over the use of engravers to re-touch originals. Did engraving make a photograph more - or less - a work of art? Thus a detailed review in the Art Journal praised one print: '"The Venus" comes out very finely; this is untouched by the graver'; but also spoke in favour of such enhancement (6).

What would subscribers have been thinking in January 1857? Putting aside any rumours of internal conflicts, could the delay of Part II perhaps be attributed to eager buyers clamouring for more Part I folios than had been expected? Or had there been hold-ups at the wholesalers, even unexpected snags with implementing the new process? The workers had been kept busy, as confirmed by the publishing date of Jan. 1st., but the contents could suggest operational difficulties. Two of the prints formerly advertised ('HANGMAN'S BRIDGE', and 'HELMSLEY CASTLE' by Fenton) weren't included (and never did surface within this series). There were plenty of products advertised, but several vague terms for when they might be forthcoming.

What about the covers themselves, and their publicising of the same things in slightly different ways, and the changing of minor details? The cover information, rather than being printed from laboriously produced photogalvanographic plates, must have been typeset. This would have allowed easier alterations, but whilst some changes could be classed as clarification, others appear almost haphazard. Tellingly, it is apparent that there wasn't always time to insert every correction. So, on a Choice Proofs folio, the cover listed 'Beehives, Burnham Beeches', instead of the Hampton Court print which was issued. Purchasers might well have thought that efforts had been made to satisfy criticism by including last-minute substitute illustrations, but may have also feared there were unresolved difficulties.

The Company was seen to be producing saleable work, and striving for much more. Equally, many of the productions were either still on the drawing board, or, at best, still in the midst of print runs. The process worked, but there must have been unease about print run quality. Variable prints might have resulted in the release of prime (and more expensive) first impressions, the Choice Proofs, promised as limited editions. Then the average quality Proofs would be intended to satisfy mainstream demand, with finally the Prints, pulled off when the plate had deteriorated, giving an inferior, but cheaper option.

Part III had not been advertised on Part II, which could have looked like a warning to purchasers, but it was duly produced in March 1857. The Manager must have decided on a more realistic schedule, for the front page information had altered: 'TO BE CONTINUED ALTERNATE MONTHS'. The 'PART III. CONTAINS' now could include 'BEE HIVES, Burnham Beeches', along with another couple by Fenton, 'RIVAULX ABBEY.- The Choir', and 'TIRED OUT. Bedtime'. The fourth print was the previously mentioned 'NO WALK TO-DAY' from Mrs. Anderson's painting. The contents for Part IV were reassuringly advertised, and for the first time did not contain Roger Fenton's name. There was to be 'A BRACE OF BIRDS' by Lake Price, RICHMOND ON THAMES' by Barnes, 'FORTUNE TELLING' by Reilander, and 'CATTLE' after SYDNEY COOPER'. The rest of the page was the same text as that used in Part II, maybe occasioned by pressure to get the edition out in time.

Publication however was not clear cut, for in March there were also Choice Proof folios of Part II issued. Unlike January Part IIs, they could at this date include Parts I-IV contents on their front covers. Parts I and II contents were printed either side of the equestrian statuette; below came 'PART III. CONTAINS' plus 'PART IV. WILL CONTAIN'. Part III's listing was correct, but Part IV's was to alter.

The Part III folios this month included for the first time inner front cover advertising. As if to confound doubters, the headline declared 'PUBLICATIONS OF THE COMPANY', which as well as being 'EXECUTED BY THEIR PATENT PROCESS' were finally 'NOW READY'. Listed were 25 works. Some had been, and some would be, published within the Photographic Art Treasures series. Included were the Venus de Milos, Don Quixote, Crimean Braves, Lynmouth, Cedars, Raglan, Hampton Court, Bee Hives, Cattle, (now acknowledged as being photographed by Colls, this time forenamed Lebbeus rather than Lebbin), Like Sister Lizzie, No Walk Today, and Unconscious Beauty (a print which had first featured on Part I as 'In preparation'). Otherwise, there would be what were described as 'facsimiles', Raphael's 'VENUS RISING FROM THE SEA', and 'ANTIQUE IVORY', photographed by Fenton; there were extra prints from him introduced, 'A SUMMER'S AFTERNOON', 'HOME, SWEET HOME! An English Garden Scene', and 'LADY JANE GREY'. There was also another couple of prints from Lebbeus Colls, which, not so memorably as his 'Socks' pair, were entitled 'MORNING' and 'EVENING'. There was 'STATUE OF VICTORY' by RAUCH', a print of 'CHARTRES CATHEDRAL, (Porch)' by Bisson, and 'ROME.- Arch of Severus, Column of Phocas'. 'EQUESTRIAN STATUETTE (The Queen, Marochetti.)', depicting a recent commission by Victoria's favourite sculptor, is very likely the print used frontally on Choice Proof covers.

The prints were mostly priced, and most but not all were available in the typical three qualities. The majority had the range of 7s. 6d., 3s. 6d., and 2s. 6d. 'DON QUIXOTE' and 'HOME, SWEET HOME!' were allotted the top price for Choice Proofs of 10s. 6d; a few got in 5s. for the Proofs (including 'CRIMEAN BRAVES' and 'LADY JANE GREY'). Oddly, Fenton's 'ANTIQUE IVORY' was only 2s. 6d. or 1s. 6d. for Proofs or Prints; it was not available as a Choice Proof. Does this indicate the original photograph was not of the standard to make superior

prints? Or does the fact that it and 'EQUESTRIAN STATUETTE' had the lowest prices (5s., 2s. 6d., 1s. 6d.) show an attempt to boost sales for less popular subjects?

The page finished with 'Subscribers to PHOTOGRAPHIC ART TREASURES may obtain portfolios prepared to contain the plates for one two or three years, as desired.' This was presumably to encourage some commitment from the public for the expected long run of folios; no hint of any early closure here.

The inner back cover continued with more mixtures of the old and the new. The six-print series disclosed a fourth Lake Price title 'THE DOMINICAN' to add to the three previously given, but now there were two Reilanders to complete the package: 'EARLY CONTEMPLATION' and 'OLD MOTHER GOOSE'. 'Early Orders should be given to secure Proofs', it urged, prices 10s. 6d., 5s., and 3. 6d. Mrs. Anderson's 'NO WALK TODAY' and 'SISTER LIZZIE' were put forward as 'NOW READY, A PAIR', here with an extra choice to what was offered on the inner front page – Coloured at 5s., to add to the three other levels, of 7s. 6d. Choice Proofs, Proofs at 3s. 6d., and Prints at 2s. 6d. The list of subjects which would 'Shortly be ready' has the Colls' pair of 'MORNING' and 'EVENING', in a more lowly range, Proofs, 3s. 6d., Coloured 3s., Prints 2s. Confusingly, these had on the inner front page been deemed 'READY'. This divergence is most likely explained by the pages having been composed at different dates. There were two separate Reilanders, 'IN SMOOTH WATER' and 'DON'T CRY MA' '; they were not available in colour, but Choice Proofs were 7s. 6d., Proofs 3s. 6d., and Prints 2s. 6d. This complicated advertising showed the Company juggling to market multiple printings. There was evolution, but not necessarily simplification.

Part III's outer back cover was no less crowded, and further increased the range of products. The 'IN PREPARATION' section here named 19 works. Some of them were new inclusions, like 'ENGLISH WAYSIDE INN' by A.Roslin; some were uncredited: 'SPITHEAD, Baltic fleet at Anchor', 'FLOWERS AND FOLIAGE'. Fenton was cited for 'COURTING - Signing and Sealing', but not for 'BEECH BOLES, Burnham Beeches', (a variation, or a title amended, from his 'Beehives'?). Reilander and Barnes prints were included. Again came the generalisation 'AND NUMEROUS OTHER SUBJECTS'.

The Bolton Abbey collection had grown slightly, now 'Eleven Subjects', from the ten of Part II. The subjects were this time itemised, 'Front', 'West', 'North', 'From the Lover's Seat' etc. They included an extra 'Frontispiece', a 'PORTRAIT OF ROGER FENTON, ESQ.' The specifications added 'Average size of the Subjects, exclusive of margin, 15 in. by 11 in.'. Although ever more prints were reaching fruition, 'STEREOSCOPIC VARIETIES' remained as 'Shortly will be issued'. They were now stated to be 'By O.G. REILANDER, &c.&c.', unexpectedfly leaving out Fenton. Was this an attempt to make the range sound broader? The other prospective stereo prints, trailed since Part I, were still promising 'Notice will be given when the above are ready', which must be evidence of continuing production delays.

For the three classes of Impressions, the public was prompted 'Early Orders should be given to secure Proofs'. New business was still being encouraged: 'ESTIMATES GIVEN FOR ENGRAVING BY THE COMPANY'S PATENT PROCESS', along with the already utilised description of being 'Drawn by Light and

electricity...'. Squeezed into a space at the bottom of the page was a thin line declaring 'All Communications to be addressed to the Company's General Manager WILLIAM HY. BOSLEY'. Bosley had actually been employed since October 1856, and was responsible for producing all the folios, but only by this Part, after settlement of the Dallas issue, could he be named.

Deductions from the small (and large!) print of the covers, are adding to the feeling that Photogalvanography was an innovation with much potential, but much travail. Bosley must have been very busy overseeing the deluge of work involved, from the standard of plates and prints through to pricing structures. There had been many changes within these few hectic months of production.

How much was the Manager – or Pretsch for that matter – involved with all these variations of the folio covers? The printers would have taken instructions, but some of the peculiarities in style could be accounted for by individual interpretation. Some of the changing time scales for the prints on offer must reflect the delays in perfecting plates and prints, partly because of the use of engravers to enhance poorer images. Purchasers might well have had increasing suspicions that all was not well with the Company. However, delays could have had a beneficial side effect. Publicity would have been gained by Don Quixote and other prints already being seen in public. The Photographic Society Exhibition in December 1856 had featured a section of photogalvanographs from the collection being formed at Sydenham by the Crystal Palace Company for general display (7).

Part IV still announced Photographic Art Treasures were 'TO BE CONTINUED ALTERNATE MONTHS', and the Company did prepare IV for May publication. The front cover had the same small central prints it had used before – St Laurent's, or the Equestrian Statuette (which was now bore a line underneath crediting it to the Art Union of London). There is something of a puzzle on a surviving cover, for it has a 'Published' date under the Church porch illustration, of 'March, 185'. In other words, it is printed with what seems to be an unfinished date. That could have been just a typesetting mistake. But, does the citing of 'March' suggest this could have been the re-use of a cover originally intended for Part III? Could that be because there were unused covers from lack of sales? It supports the theory that the photogalvanograph was printed onto the cover before any later print items completed the front page.

Parts I & II being listed probably meant there were back numbers still to be sold, although the Company would have hoped to continue supply if there was sufficient demand. 'PART III.CONTAINS' listed the actual contents enclosed, if 'TIRED OUT. Bed Time' by Fenton is accepted, (which would seem reasonable considering the scene portrayed), as being the print formerly captioned Hush Lightly Tread. 'PART IV. CONTAINS' had Lake Price's 'A BRACE OF BIRDS', Barnes' 'RICHMOND ON THAMES', 'LIKE SISTER LIZZIE', the Mrs. Anderson print, and Reilander's 'OH LIFT ME THE VEIL OF THE FUTURE'. This was probably another title variation, for the print previously called Fortune Telling. In any case, within the folder this was replaced by the copy of Sydney Cooper's 'CATTLE' painting. Interestingly, in one of the Proofs folios I studied, two of the prints included (Lizzie and Birds), were in fact Choice Proofs. Whether this was regular practice, or

perhaps resorted to because there were insufficient correct category prints available, is not known.

If business was not as brisk as had been hoped, the retail network was being steadily extended. Lloyd (Bros) & Co. were still agents, at least at their Gracechurch Street address (the Ludgate Hill location was no longer included), but there had been a move out into the provincial cities. Three other agents were now dealing with Photogalvanographic business: 'L.McLACHLAN', in Manchester, 'J.R.ISAAC' in Liverpool, and 'JAMES WOOD', in Edinburgh. No postal addresses were supplied for these, but they were all established names which would have been familiar to the readership.

The inner front page of the Part IV cover had basically the same 'NOW READY' list as Part III, though it had only 24 titles instead of 25. Again, this suggests that cover details were only assembled once it was clearer what could be provided. Looking at the list, there were more curious fluctuations, like Rauch's 'STATUE OF VICTORY', being here referred to as 'VICTORY', despite plenty of room on the line. This could be merely a type-setter's shortcut. Some of the titles were in the same order as Part III, but there were also some differences, perhaps indicating typesetting adjustments to a previously-composed block. 'ANTIQUE IVORY' had disappeared. Its prints may have been of deficient quality, but they could have sold out, on account of their cheaper price. The dearer 'LADY JANE GREY' prints on the other hand were also no longer included.

Others missing were 'EQUESTRIAN STATUETTE' and 'HOME, SWEET HOME!'. Replacing them were several prints recognisable from past reference, Fenton's 'RIVAULX ABBEY', Lake Price's 'BRACE OF BIRDS', Barnes' 'RICHMOND', and Reilander's 'OH LIFT ME THE VEIL OF THE FUTURE'. The prices seem to have been somewhat rationalised. The two Venuses, 'DE MILOS', and 'RISING FROM THE SEA', plus 'CHARTRES CATHEDRAL', came out dearest (10s. 6d., 7s. 6d., 5s.). The remainder were all categorised as Choice Proofs for 7s. 6d., with the majority of Proofs at 3s. 6d. Only 'BRACE OF BIRDS' by Lake Price and 'ROME.- Arch of Severus, Column of Phocas' (the print credited as 'after Le Jeune') were offered at 5s.; these two also had the higher price of 3s. 6d. for Prints. Whether this was because the photographers demanded more, or the pricing reflected quality or availability, is unknown. Besides these individual offerings, the Company plugged all existing Part works: 'Portfolios for the PHOTOGRAPHIC ART TREASURES may be obtained.'

The inner back cover of Part IV, like Part III, advertised the sets of Lake Price/Reilander prints, (still 'Early Orders should be given to secure Proofs') and the pair of prints from Mrs. Anderson paintings. Reilander's 'DON'T CRY MA' was in the 'Shortly be ready' section, along with another 'Photograph from the Life' by Reilander: 'THE SURPRISE- A Young Person wants to see you, Sir'. Surprisingly, this new offering called for notably expensive prices, Choice Proofs being 21s., Coloured 12s., Proofs 10s. 6d., and Prints 7s. 6d. As can be noticed, the least impressive images of 'THE SURPRISE', the Prints, were still as dear as some other best quality Choice Proofs. Reilander's 'SMOOTH WATER' of Part III was not this time included, so whether it had ever been ready, or whether it had been published and sold out, is unknown.

Outside on the back of Part IV, the appearance was much the same as Part III, but under scrutiny, once again it is apparent that differences of layout, typefaces and content have been incorporated. It still has an 'IN PREPARATION' block at the top, but there are now only fourteen named items, instead of nineteen. There was only one potentially new title, 'TINTERN ABBEY', but this may have been the print formerly referred to as 'TINTERN-The Pitcher'. 'SMOOTH WATER' has gone from this list as well as from the inner back page. Barnes' 'RICHMOND ON THAMES' is no longer featured here; several of Fenton's scenic views, as well as Lee's 'A DRINK AND A BITE', are also removed from the list. The additional 'A NUMEROUS COLLECTION OF...' has become 'AND NUMEROUS OTHER SUBJECTS'. Could these variations mean that some titles had just reached fruition, or were they subtle advertising tactics?

The 'BOLTON ABBEY' series, of 'surpassing loveliness' (surely the omission here of the prefixing 'most' was not a judgement?) was given with the same list of contents as Part III. There was a difference in the wording though, the Company 'have arranged' of the previous issue, now saying 'are preparing' instead. Was this a step forward in production, or did it mean continuing delays? Interestingly, the prices had been altered. There were increases of one or two guineas, so quotes of £3. 3s., £5. 5s., or £7. 7s. now spanned the classes of prints. Was this a reflection on the extra time and therefore expense which had been incurred in their (ongoing) production, or could it have been their increasing scarcity – a supply and demand situation?

The 'STEREOSCOPIC VARIETIES' were advertised again, though now Fenton was returned to the credits, plus 'O.G.REILANDER, &c.&c.', still with the statement that they 'Shortly will be issued'. Prosaically, they are no longer 'Morceaux', but 'Pictures'. The remainder of the page looked the same, with the minor differences in composition we have come to expect. In the case here, we have such minutiae as 'Engraved on copper...' replacing 'Drawn...', in the phrase which continues '...by Light and Electricity...'. The 'PRINTER'S INK AND PAPER;' now had a semi-colon to replace the former full stop, for a wordy chunk of description was appended, with a juggling of phraseology for emphasis: 'Materials which have stood the test of time for upwards of Four Centuries; so that by this New and Beautiful Art of Engraving, the liability to fade and the uncertainty of colour, so objectionable in Photographs, is obviated, while the Detail and Touch of Nature is faithfully Preserved.'

Part V had for its front cover a similar format to the Part IV design. Previous issue contents were repeated. 'PART V. CONTAINS' had the correct details, being Lake Price's 'SOLDIER'S TOAST', Fenton's 'RICHMOND', H.White's 'THE CORNFIELD', and 'CAPTURE OF KNIGHT KUENRINGER', this a print after a drawing by I.N.Geiger. They all were freshly photogalvanographed prints, dated June or July '57. The claimed date for publication was 'JULY, 1857', and certainly some copies were printed, but they do not seem to have been widely distributed. I think this is explained by July being the most convincing date for the collapse of the Company, after its desperate battle to remain viable.

Nevertheless, in July '57 the Company still seemed to be aiming to continue with the Photographic Art Treasures series, for V printed the expected trailer

for the next instalment. 'PART VI. WILL CONTAIN' proposed H.White's 'COTTAGE SCENERY', Lake Price's 'THE OLD COVENANTER', and a couple of Reilanders, 'MOTHER GOOSE' and 'ATTRACTIVE AND ENTERTAINING'. The plans for Part VI were not realised, for it never appeared.

Evidence that the company had still, even at this late stage, been working on boosting sales, is proved by another expanded list of agents. Lloyds were still there as 'WHOLESALE AGENTS', along with a newcomer, 'GAMBART & CO., BERNERS STREET, LONDON'. In addition, there was a new category of 'RETAIL AGENTS'. Listed were 'COLNAGHI & CO., PALL MALL', 'HARLAND (BROs.), BRADFORD', and 'CURRY, BRISTOL'. They had swelled the ranks of the provincial firms previously classified as Wholesalers.

Inside the front cover came another of the 'NOW READY' lists, as seen in Part IV. There were minor text differences, but price changes show more deliberate alteration. 'Brace of Birds' had kept 3s. 6d. & 7s. 6d. for Prints and Coloured, but Choice Proofs had been reduced from 10s. 6d. to 7s. 6d., and Proofs, from 7s. 6d. to 5s. This could imply that the better versions were not selling as well as expected - or, more positively, that a surfeit of prints had been successfully pulled from the plates.

Inside the back cover, some of the previous offerings were repeated. At the head came 'Cathedral Antiquities of the British Empire', then the Lake Price and Reilander set of six 'executed from the life', and the Mrs Anderson paintings pair of prints. There were then some differences, with Lake Price's 'BRACE OF BIRDS' having its Choice Proofs and Proofs specified as 10s. 6d. and 7s. 6d., again contrasting to cheaper quotes (7s. 6d. & 5s.) on the inner front page. There was a new mention, Reilander's genre scene '"I PAYS"', which replaced his Surprise, and was offered at the same prices as Birds.

The outside back cover of Part V was, unusually, primarily based on the preceding Part's back page. The only differences were in the 'IN PREPARATION' list, which substituted H.White's 'ENGLISH COTTAGE SCENERY' for 'UNCONSCIOUS BEAUTY'. Further down the page, neither Fenton nor Reilander was named as being responsible for the 'Selection of Exquisite Stereoscopic Pictures'. This could signal other photographers were being brought into the fold, but alternatively could be blamed on typographical inconsistency. The fewer text changes here were possibly by design, but were more likely occasioned by the Company's imminent collapse.

Having examined the folio covers in detail, can we confirm any of the suppositions by considering the contents? The print-bearing pages of the folios were off-white paper, stiffer than the covers. Each page, in order to present the image, had a central depression with a slightly raised border. The prints to be displayed are as individual as their covers. It is apparent that each was separately produced. Hardly any have the same dimensions, but the greatest length was 11 ½ inches, with a width average of 8 inches. Most had straight-forward squared borders. Two of Fenton's (York, from the Lendell and Hush! Lightly Tread) had their top corners rounded, as did Mrs. Anderson's painting Like Sister Lizzie. Another of Fenton's, (Rivaulx) had a slightly bowed top edge, whilst the top of Lake Price's Brace of Birds was distinctly arched. They were all printed on thin white 'Indian' paper. The prints were glued

into their own spaces on the backing pages. It can be observed that it was only after the photogalvanographs had been positioned, that more printing took place. Below some images, writing has only partly appeared along the bottom edge of the thin paper, the lower part of the writing appearing on the thicker paper of the backing sheet. The prints were protected by loose tissue sheets.

All the published photogalvanographs carried some information about the Company, and/or the process, all in familiar terminology. So we find: 'Photographic Art Treasures'; 'Published (here the date was inserted) by the Photo-Galvano-graphic (sometimes this was un-hyphenated, or even just Photo-Galvano) Company, London'; A description of the process was sometimes included: 'Engraved (or 'Produced') on Copper by Voltaic Electricity printed in Printer's Ink in the Ordinary manner'. The date that prints were published were for Part I all October 1856, and Part II in January 1857. However, by Part III, the dates given below the prints themselves were either still January '57 (Burnham Beeches & Rivaulx Abbey'), or March '57 (No Walk Today & Hush, Lightly Tread). By Part IV, theoretically published in May, the dates given were May 1857 (Lizzie & Brace of Birds), or June '57 (Cattle & Richmond). This proves that the folio, though dated May, must have been only circulated in June at the earliest. The fact that Press reviews only emerged in June support this. Part V had June or July on its prints.

If the photographer or painter was named, a few more variations appeared. We find 'Photographer Roger Fenton' (sometimes with the addition of 'B.A.'); 'Composed and photographed from the life by Lake Price' (on Don Quixote), or 'Engraved from a photograph by Lake Price' (Brace of Birds); 'Photographer R.F.Barnes'; 'Photographed from Nature by Lebbin Colls' (Richmond on Thames); or 'Lebbeus Colls Photographer' (No Walk Today); 'Engraved from a Photograph after a Painting by Mrs. Anderson'; 'Photographed from the Life by Cundall and Howlett by Command of Her Majesty' (Crimean Braves).

Individual titles could have extra text added. On Fenton's Hush Lightly Tread, a few lines were given in explanation of the scene (8). Similarly, on Crimean Braves, the text explains the portraits (9). Don Quixote In His Study has some lines from Smollett's translation quoted (10).

The inner pages were dealt separately from the covers, by two firms named on some of the prints as T. Brooker and R.Holdgate. An additional feature of the print-bearing backing pages can be an embossed oval stamp, with 'THE PATENT PHOTO-GALVANO-GRAPHIC COMPANY' round the edge of the oval, and in the centre, 'HOLLOWAY, LONDON'. Most pages do not have this stamp, and in one instance (on Barnes's Richmond scene) I have found instead a monogram, the stylised letter of P, G, and C, evidently standing for the Company name. This monogram so rarely appears (in a Proof folio, only one other, on a frontal St Laurent's print) that I wonder if it signifies a personal production by Pretsch.

In conclusion, in this essay I wanted to concentrate on the often unconsidered messages conveyed by the packaging of the product. From the information provided for subscribers, what would have been deduced at the time?

Here was a new Company, launched to promote a technological breakthrough, which could make photographs both permanent and accessible. Prominent photographers were involved, and a network of distributors was developed. We know from contemporary press reports that the folios had been eagerly anticipated, but that criticism followed, besides vigorous debate. The folios provide direct evidence of what the Company was trying to achieve, and equally of the problems it underwent. A wealth of photogalvanographs was aimed for, but some prints did not materialise, and others, far from being 'shortly' available, could be long in the production line.

That is understandable considering the technical difficulties. Pretsch at first claimed his process was not too lengthy (11), but others spoke of production taking many weeks (12). This would still have been cheaper, and far quicker, than conventional engraving. Photogalvanographs had the obvious advantage of being more true to life than an engraving, and were said to be capable of almost limitless impressions, ( top estimate: sixty thousand million! (3) ). However, the folders provide evidence that delivering results was not at all straightforward. If prints were unsatisfactory, the plates could be improved by engraving, but the cost implications would have been considerable. The covers demonstrate how the Company was adaptable, and strove hard to increase income. In reality it must have failed to generate sufficiently improved sales figures to offset higher than anticipated costs. We also know that from its earliest days the Company bore a crippling financial burden from unforseen legal complications.

The covers clearly show how the printers constantly chopped and changed to fit in with the Company's ongoing ideas of product presentation. Layouts, particularly front covers, were fairly standard, but the details given were not. The multiple possibilities, and uncertainty over when, and how successfully, prints could be sold, perhaps precluded any simple solution. The impression given is that the Company always struggled to hit upon a winning formula. The Company failing in the middle of a production run suggest that although photogalvanography succeeded in making permanent prints available from photographs, it was not then cheap, reliable or quick enough to be operated at a profit. Sales figures are not available, but losses which forced the company to collapse in 1857 were admitted to be about £4,000 (13).

The Company assets were last heard of in 1864, when 'some of the best of...the plates were sold as old copper' (14). Pretsch laboured on with improving his processes, and there seems to have been some attempt to support him with the raising of a subscription. Poor health and impoverishment forced him to return to his old employment in Vienna. In England, Pretsch became disregarded. His demise from cholera in 1873 was only perfunctorily noted (15). Belated recognition came in 1965, when he was selected by an international jury as one of the 105 greatest contributors to the progress of photography (16).

Pretsch had attempted to spread culture to the masses, and did make a technological leap towards achieving that goal. It can be said he was vindicated in declaring a 'New Era in Art'. The basis for an industry was laid, and photogalvanographs, besides proving to be permanent, still stand scrutiny as artistic creations.

The Photographic Art Treasures covers which contained these pioneering prints have all but disappeared, either into oblivion or at least obscurity. They were designed as disposable packaging, but where they have survived, they provide us with unintentional commentary on Pretsch's troubled Company. These

ephemeral folders have been overlooked, but I would suggest they are intrinsically important documents. They afford us a unique opportunity to broaden our understanding of historic imagery.

# Appendix

### ART TREASURES - PARTS I - IV

[Photographer] [Issue and Contents]

Part I - Nov 56

ROGER FENTON York Minster from Lendall

" Cedars, Monmouthshire
" Raglan Castle - Porch
" " - Watergate

Part II - Jan 57

WILLIAM LAKE PRICE Don Quixote in his study

WILLIAM HOWLETT Crimean Braves
LEBBIN COLLS Lynmouth, Devon
ROGER FENTON Hampton Court

Part III - Mar 57

LEBBEUS COLLS No walk today [after Mrs. Anderson]

ROGER FENTON Beehives, Burnham Beeches

" Hush Lightly Tread {Tired out/ Bed time]

" Rivaulx - Choir and Transept

Part IV - May 57

LAKE PRICE Brace of Birds

\* Un-named Cattle

[after Sidney Cooper – printed by T.Brooker]

R.F.BARNES Richmond on Thames

Un-named Like Sister Lizzie

[after Mrs. Anderson – printed by R.Holdgate]

\* This print seems to have replaced one named in the Contents on wrappers,

Reilander's 'Oh Lift me the Veil of the Future!'

# ART TREASURES - PARTS V,VI.

# Part V - Jun/July 57 ...

(Seems to have achieved partial distribution before the Company ceased publication)

LAKE PRICE	Soldiers Toast "And let the Cannikin	
	dink, dink" [Othello]	June 57
FENTON	Richmond	July 57
Un-named	Capture of Knight Kuenringer	
	- after I.N.Geiger	Jun 57
****	m, a a 11	· · ·

HENRY WHITE The Cornfield July 57

Part VI -

(Planned, but unpublished......Advertised list of 'Will Contain')

HENRY WHITE English Cottage Scenery
REILANDER Attractive and Entertaining
LAKE PRICE The Old Covenanter
REILANDER Mother Goose

Notes

- 1. (1856), 'Photogalvanography', *Photographic Notes*, Vol.3, 25 Feb., p.12.
- 2. (1854), 'Production of Copper and other Printing plates', *Patent No. 2373*, 9 Nov. 1854, Sealed 4 May 1855.
- (1855/6), 'Obtaining Cylindrical and other Printing Surfaces', *Patent No. 1824*, 11 Aug. 1855, Sealed 5 Oct. 1855, & 8 Feb.1856.
- 3. (1856), 'Photographic Notes', Photographic Notes, Vol. 3, 15 Nov., p.235-7.
- 4. (1856), 'New Era in Art', *The Athenaeum,* No. 1513, 25 Oct., p.131. 'Agents wanted' was the succinct appeal.
- 5. Commissioners of Patents, (1861), 'Abridgements of Specifications relating to Photography', George E. Eyre and William Spottiswoode, London, p. 62.

This gives the specifications for No.1344 of June 5, 1856. Dallas lodged this application for provisional protection of his 'Improvements in chemical preparations applicable to the photographic and photo-galvanographic processes', but did not proceed with it.

6. (1856), 'Reviews...Photographic Art-Treasures. Part 1. Chartres Cathedral; The Venus de Milos.', *The Art-Journal*, December, p.383.

'The invention...is a wonderful stride in the Photographic Art; but we have no apprehension that, under any circumstances, it will supersede the labours of the engraver. Nature, to be pictorially represented, always requires some assistance from Art, and must come under the laws which regulate the latter.'

- 7. (1856), 'The Soiree of the Society', *Journal of the Photographic Society*, Vol.3, No. 49, 22 Dec., p.171-2.
- 8. 'Hush! Lightly Tread: still tranquilly she sleeps
  I've watches suspending even my breath in fear
  To break the heavenly spell. Move silently.'

The picture shows a mother cradling a sleeping child, with another daughter in attendance. Fenton may well have used his own family as models here.

- 9. The three splendidly posed soldiers are explained as 'Men of the Trenches and Battlefields of the Crimea. Coldstream Guards Privates.' Cundall and Howlett had been commissioned to photograph some of the returned heroes for the Royal Collection.
- 10. 'Nay, to such a pass did his curiosity and madness in this particular drive him, that he sold many good acres of terra firma, to purchase Books of Knight Errantry'. The figure in the midst of heaps of paraphernalia looks out from his study with a suitably maddened expression.
- 11. Pretsch, Mr., (1856), 'The Photographic Society of Scotland', Journal of the

Photographic Society, Vol. 3, No. 42, 21 May, p. 49.

'The rapidity with which plates can be produced is another remarkable feature of the invention. From three days to three weeks is sufficient for the production of engraved plates'.

- 12. (1856), 'Photographic Notes', *Photographic Notes*, 15 Nov., p.236. A step-by-step guide is given, followed by 'The entire process therefore occupies about six weeks...Here then are the means of almost indefinite multiplication'.
- 13. Bolton, John Henry, (1857), *The Correspondence of William Henry Fox Talbot*, Talbot Correspondence Project, Document No. 7480, 4 Nov., [Online], Available at: http://foxtalbot.dmu.ac.uk/letters/transcriptName.php?bcode=Bolt-JH&PageNumber=

Pretsch's solicitor disclosed 'they have lost nearer £4000...and that but for the action which threw the apple of discord into their ranks, this break up would not have taken place.'

- 14. (1864), 'Correspondence', Photographic Journal, 15 Jun., p. 68
- 15. (1873), 'Obituary', Photographic News, 14 Oct, p.564.

'Pretsch...was for many years associated with photogalvanoplastic processes for photo-mechanical printing in which however, from a variety of causes he failed to achieve the success he deserves. He was, we believe, for several years past engaged in connection with the Imperial Printing Office in Vienna.'

16. Sipley, Louis W., (1965), *Photography's Great Inventors*, American Museum of Photography, Philadelphia, p.76.