Before setting down the results of my attempt to reconstruct the plate of this prime favorite among the many interesting early issues of the United States postage stamps it will be well to tell how I happened to become engaged in this most fasinating problem and to clear up any misapprehension which may exist on account of certain incorrect statements which have been circulated in the philatelic press and elsewhere and have been accepted in some degree by other philatelists in regard to the collection of 1847 stamps owned by Representative Ackerman and the way it was put together.

Of the value of the results attained the reader may judge for himself but whatever their value to philately may be, they were made possible through my access to the Ackerman collection. This extraordinary collection was loaned to me in order that sufficient material at least to make a good start should be available for the work and throughout the entire period during which my efforts were largely concentrated on the work it was referred to constantly. It is the basis upon which rests the entire achievement.

Previous to 1919 my knowledge of both the 5¢ and 10¢ stamps of the 1847 issue were little, if any better than that of most philatelists in America. My own personal collection contained a pair of 5¢ found in a family correspondence of a friend in Vermont, two or three single 5¢, one of which was a relic of schoolboy days in Philadelphia and had cost 40¢, and one 10¢ for which I paid my good friend H.F.Colman the modest sum of \$5.00 about 1901. The latter was soon soaked off the cover but the cover was carefully preserved.

In 1918 and for some years previously the Ackerman collection of the 1847 stamps, while by no means the largest such collection, contained many fine items and was certainly one of the most important collections of this issue. Late in the fall of that year A.K.McDaniel of Denver, Colorado was in New York City and talked with me about selling his collection of the 3¢ 1851. At that meeting he was not favorably inclined toward disposing of his 1847 stamps. A few weeks later I purchased nearly all of the United States collection of the well known philatelic writer, William L. Stevenson, except his 1847 stamps, and in company with Judge Robert E. Emerson of Providence, went to Cincinnati, St. Louis and Chicago taking most of the Stevenson collection with me. While at Cininnati a telegram I received from Mr. McDaniel indicated that something worth while might be

accomplished in Denver and regretfully parting company with Judge Emerson at Chicago, early in January, 1919, I went to Denver and opened negotiations with Mr.McDaniel for the sale of his 1847 collection to Mr. Ackerman. The collection was sent to New York and reached there before my return. The negotiations were completed early in February, 1919.

From Chicago to Kansas City on the Sante Fe train I enjoyed the excellent company of D.C. Hammatt of Topeka, Kansas, who was interested in the 10¢ of 1851 and 1857 in the Stevenson collection and to whom nearly all of those 10¢ greens were sold shortly thereafter. This apparent digression is made because when I was preparing the article on the 10¢ 1857 for the series on the 1857-60 issue for Mekeel's Weekly Mr. Hammatt kindly loaned me the 10¢ 1851-57's from the Stevenson collection together with his other 10¢ green stamps of those series and the Mekeel's articles were largely the result attained by studing his material. My only experience in plating which could be fairly compared with plating the 10¢ blacks of 1847 was gained in attempting the reconstruction of the bottom row of the first plate of the 10¢ green. Stevenson believed the "full shells" stamps were the ten stamps comprising the bottom row of the two panes on that plate, I was unable to reconstruct the bottom row of either pane but did identify sixteen different "full shells" stamps and satisfied myself that all twenty of the stamps comprising the bottom row of that plate were the "full shells" variety. Although many of the 10¢ stamps of the 1847 issue are difficult to identify the reader may be pleased to know that many others are much less difficult to "plate" than the 10¢ green stamps referred to.

The McDaniel collection of 1847 stamps was contained in five oriel albums - four albums of the 5¢ and one album of the 10¢. Of the 5¢ stamps there were 777 items, (each pair, strip, block or cover counting as one item), and of the 10¢ there were over 200 stamps - in both cases reprints, proofs, ect., are excluded. The total catalog value was between \$4,500 and \$5,000. Being busily occupied in disposing of the Stevenson collection, the McDaniel collection remained untouched until the following fall.

In the summer of 1919 I was approached by Dr.Carrol Chase who wished me to negotiate the sale of his collection of 1847 stamps to Mr.Ackerman. This collection had been offered to Mr. Ackerman over three years before but the difference between the price asked - approximately ten times catalog value of the original stamps - and my estimate of the actual value was so great the interested parties did not reach an agreement. The Chase collection was then contained on approval cards. Afterwards it was mounted in three loose leaf albums and beautifully lettered. Important additions had also been made between 1916 and 1919 and

When I examined it in the summer of 1919 it presented a very fine appearance. It then contained 378 of the 5¢ stamps and 111 of the 10¢ - each pair counting as two stamps but the totals given do not include reprints, proofs, essays, ect. The total catalog value of all the original stamps was between \$2000 and \$2500.

The stamps in the Chase collection duplicated so much of the material in the McDaniel collection that I saw no satisfactory reason why Mr. Ackerman should purchase it. The sum involved was comparatively large and the benefit to be derived by additions to his collection along the lines in which Mr. Ackerman was then interested seemed comparatively small - not to mention other reasons which need not be stated here. At Dr. Chase's request, however negotiatins were renewed and in the latter part of August 1919, an agreement was finally reached whereby Dr. Chase sold his entire collection of 5¢ and 10¢ 1847 stamps, and I became the sole owner. In recognition of the assistance by Mr. Ackerman which enabled me to fulfill the requirements laid down by Dr. Chase it was agreed between Mr.Ackerman and myself that I sould select from the Chase collection whatever items I thought might improve the Ackerman collection - the price to be paid me for same being fixed by myself.

Mr.Ackerman then turned over to me all the McDaniel collection, some very fine 1847 items which he had recently acquired, another U.S. collection, and all his own 1847 collection. I spent a month working on this whole accumulation and the Chase collection, selecting the items I thought Mr.Ackerman should retain and discarding the others, regardless of the source from which any of them had come. When completed the collection filled eight oriel albums, six of which contained the 5¢ stamps and the other two contained the 10¢ stamps. Counting each pair as two stamps, ect., there were about 1,000 copies of the 5¢ and over 300 copies of the 10¢.

The collection was arranged and mounted solely with regard to convenience in locating any of the varieties. The specimens off cover were classified mostly according to cancellations and the covers were arranged in groups. Those bearing railroad postmarks were all together, arranged alphabetically according to the name of the railroad, and most of the other covers were arranged alphabetically according to the name of the town or city from which they originated. Of course this system has little in common with scientific philately but it had one very important advantage, viz., it was possible to determine almost instantly whether any particular item was or was not included in the collection. When exhibited at the A.P.S. convention at Providence in August 1920, the collection was in this form and so remained until the spring of 1923:

The statements made regarding the Ackerman collection are largely drawn from my own records which contain the original correspondence from Mr.McDaniel and Dr.Chase, together with many notes and other data made at different periods specified. When the collection was completed there had been laid aside a large number of duplicates. These duplicates which had come from the McDaniel collection and the other collections belonging to Mr. Ackerman were purchased by me and were marketed together with the stamps laid aside from the Chase collection. Ownership of the latter group had remained with me from the date of the sale by Dr. Chase. Altogether the duplicates totalled more than 100 of the 10¢ and over 300 of the 5¢ stamps.

It is my belief that Dr.Chase was the first collector to make a serious and extensive study of the 1847 stamps. His discoveries were important and his opportunities for acquiring material were great. For many years \$5.00 was the usual price for fine copies of the 10¢ stamp and the 5¢ stamps sold for a dollar each - or less. His letters clearly indicate he considered his 1847 collection superior to any other that had been made or probably could be made. No doubt the reader will be curious to know how the McDaniel collection could be built up in the face of such competition as Dr.Chase - whose knowledge of the 1847 stamps in 1915 was unquestionably preeminent - could give. I will try to answer the question, first quoting from a letter from Dr.Chase to me dated March 29,1916 at the end of the earier negotiations for the purchase of his 1847 collection:-

"I feel that the one thing that you did not sufficiently take into account is, that the collection cannot be duplicated. I don't believe that a man with \$-000 or \$-000 could go into the market and buy similar stamps enough to make up as representative a collection."

Soon after this letter was writen Dr.Chase went to France and served in the French army for three years. A large part of the McDaniel collection was gathered together during those years. The 10¢ stamps were acquired here, there and everywhere, many of the 5¢ stamps came from one source - a source regarding which collectors have heard many rumors and but little fact.

In 1916 Frank H. Lord of San Jose, California, sold 2,687 copies of the 5¢ 1847 to John A.Klemann of the Nassau Stamp Co., New York. These were practically all the 5¢ stamps then remaining in Mr.Lord's possession from the famous "corner" which had been started in Minneapolis about 1906. He had bought the holdings of the gentleman associated with him in the corner, had acquired many of the better specimens from another accumulation made in Wisconson at the same period, and these, with his own holdings in the original corner and those he later acquired from other souces,

finally gave him a grand total of 3,318 copies.

Before the sale to Mr.Klemann however, about 400 copies had been sold to Mr.Richardson of California and over 200 other copies had been sold in San Francisco or in that vicinity. According to my information Mr Klemann also purchased the Richardson accumulation, thus obtaining in all over 3,000 copies of the 5¢ stamp that had been in the corner.

Mr.McDaniel had an early opportunity to purchase from the stock Mr Klemann had gathered and did secure many of the finer specimans. Thus it happened that when the McDaniel collection was sold many of the more desirable of the 5¢ stamps originally gathered by Mr.Lord passed into the Ackerman collection. Some of these were discarded as duplicates when the various collections belonging to Mr.Ackerman were consolidated in the fall of 1919 and were part of the lot purchased from him and resold to other collectors by me.

This brief history of the famous corner in the 5¢ stamp is important in connection with the 10¢ stamp because it dispels exaggerated statements regarding the number of 5¢ stamps available for collectors and to a certain extent gives a definite basis for arriving at a reasonable conclusion about the relative scarcity of the two denominations. Obviously the Mineapolis accumulation should not be added to the LaCrosse accumulation and this total further increased by adding the Richardson, McDaniel, Chase, Klemann and Ackerman holdings to make a grand total of about 9,000 of the 5¢ stamps, for in so reckoning this total the same 3,000 to 4,000 different copies would each have been counted two or three times.

Mr.Lord made no attempt to acquire the 10¢ stamp. He states he never had half a dozen of the 10¢ at any one time. He believed in the 5¢ as an investment but thought the 10¢ was much commoner than it really is. What induced him to commence gathering the 5¢ stamp was his dicovery that although dealers then generally had an ample supply of the 10¢ denomination they seldom had more than a few of the 5¢ and he concluded therefor that the 5¢ stamp was the scarcer and was the stamp to buy and hold for an increase in value that was certain to come.

In my opinion Mr.Lord misled himself into an erroneous conclusion regarding the relative scarcity of the two stamps because he formed his estimate from observing dealer's stocks. It is now generally conceded that there are at least five copies of the 5¢ to every 10¢. In 1906 the 5¢ sold at 40¢ to 60¢ each and the 10¢ at \$3.00 to \$4.00 each. The 5¢ sold rapidly not so much because it was scarcer but because it gave the collector a representation in the 1847 issue – the first issue of United States stamps – for a price quoted in cents. The 10¢ sold much less rapidly because

it was not a low priced stamp for those days - it cost dollars. For every collector who could afford to pay \$3.00 for a 10¢ there were twenty collectors who could afford 50¢ for a copy of the 5¢. Hence, the 10¢ tended to accumulate in dealers' stocks while the 5¢ seldom accumulated. It might be put this way: - the 5¢ stamp was chiefly held by collectors - the 10¢ was more largely in dealers' hands. Any estimate of the relative scarcity of these two stamps based on the quantities held by dealers was certain to be incorrect. However, it is also true that the greater demand for the 5¢ would justify a price greater than 20 per cent. of the price for the 10¢ even if there were more than five copies of the 5¢ to every one of the 10¢ and eventually Mr. Lords judgement was well justified financially.

When the Chase collection of 1847 stamps was offered Mr. Ackerman in 1916 the price included the data which Dr. Chase had accumulated and which would be helpfull to the purchaser in carrying on the study of the stamps, in addition to the stamps themselves and the reprints, proofs, ect. Apparently it was not Dr. Chase's intention to include this data with the stamps and other material when his collection was sold to me in 1919. I did not receive it and in fact received no data of any kind from him, unless the lettering on the pages of the albums in which his collection was then mounted could be considered data. These pages are still in my possession but contain nothing that was of any help to me in the work on the 10¢ plate. The work itself was truly a one man job, but in stating this it is not my wish to make the slightest detraction from the constant encouragement afforded me by Mr. Ackerman, or from the value of Dr. Chase's study, or to belittle the great assistance rendered me through the loan of stamps by friends whose kindness cannot be over estimated.

This present work cannot take the place of Dr.Chase's article on the 1847 stamps and it is not my desire that it should. It makes no attempt to cover a great deal of ground already gone into thoroughly and with great detail by him, and the reader who is seriously interested in the 1847 stamps is heartily recommended to study Dr.Chase's article very carefully, bearing in mind, of course the few erroneous conclusions reached by him in regard to the construction of the plates.

In classifying and arranging the Ackerman collection very little attention was paid to plating and in fact, no plating whatever was attempted. While there certainly was a great deal of material I had neither the time nor the knowledge to make any attempt toward reconstructing any of the plates and, besides, the results of Dr.Chase's work in this direction convinced me that where he had made so little progress - in spite of his much greater knowledge and experience - it was useless for me to try. I

realized that the _peculiarities of the 10¢ stamps were such that if sufficient material of the right sort were available that denomination could be plated, but from what Dr Chase had told me, or from what he had published, I believed he had examined such a large proportion of the available supply, in addition to the stamps in his own collection, that even had I possessed his experience and ability, after a great deal of difficult work I would probably have arrived just where he did. However I thought it wise to include in the Ackerman collection the material which would likely be of most help if at some future time an attempt at plating was made, and only a few pairs and copies showing unusual margins, and other stamps likely to be helpful in plating were laid aside and disposed of as duplicates.

In December 1922, I went to England, partly for the purpose of making preliminary arrangements for the Ackerman exhibit at the International Exhibition in London in May, 1923. It was Mr. Ackerman's intention to show that part of his collection which philatelists in England and other countries abroad might be most pleased to see and which would in the least degree duplicate other collections to be shown at the Exhibition. His collection of the 5¢ and 10¢ stamps of 1847 was selected as most suitable for the purpose and early in the spring of 1923, soon after my return from London I began to prepare the collection for Exhibition. The amount of space available was ten frames, (later reduced to six), each of which would hold 16 oriel pages, or a total of 160 pages. The collection filled about 400 pages and therefore it became necessary to rearrange the stamps so that as many as possible of the more interesting items could be shown in the frames for the benefit of those of the general public attending the Exhibition. The balance of the collection could be seen only by the judges.

As the 10¢ stamps occupied only two volumes and the work of rearranging them could be quickest accomplished, (so I then thought), I began with that denomination, intending to have them out of the way in short order so plenty of time would remain to be devoted to the more difficult 5¢ stamps. Almost the first thing I noticed, however, was a copy from the McDaniel collection bearing a 10¢ stamp which I found quite impossible to reconcile with the statements made by Dr.Chase in regard to the 10¢ plates, and which convinced me that the problem of plating the 10¢ stamp while very difficult, was somewhat different from what his articles had led me to believe. It is more than likely that Mr.McDaniel called my attention to this stamp, but I was not then interested in plating and whatever he may have said made so little impression that I had completely forgotten such a variety was in the collection, or even in existance.

When Dr. Chase's article on the 1847 stamps appeared in the

Philatelic Gazette in 1916 I read them with interest although I was not then particularly interested in those stamps, but I have no recollection of seeing them between that time and the fall of 1923. I did, however, have a distinct recollection of his demonstration that there were certainly two plates of the 10¢ stamp because his collection contained, and the Ackerman collection now contains, two different copies each presumably being No. 100 on a plate because each of them came from the lower right corner of the sheet or pane, and which were so different that they could not possibly come from the same pane of the same plate. I recall suggesting to Dr.Chase the possibility of the plate having been recut and thus occurring in two states to account for these two stamps. Dr.Chase assured me he was convinced recutting could not account for the difference in these two specimens and after seeing them I most heartily agreed with him.

The stamp from the McDaniel collection which cannot be reconciled with the Chase theory of two 10¢ plates of 100 subjects each is one of the four well known shifts. This shift comes in the upper left corner of the pane and was correctly plated by Dr. Chase as occupying position No.1. The stamp has a wide margin at the left and beyond this margin is part of another stamp. The part of the stamp which shows at the left of the margin is identical with the corresponding part of another copy which occupies an upper right corner position and is undoubtedly No.10. In one abnormally margined specimen therefore we have for plating purposes the equivalent of a horizontal pair consisting of two corner stamps presumably No.10 in the left pane and No.1 in the right pane seperated by a wide blank margin.

All attempts to reconcile this incomplete pair with a single pane of 100 stamps met with total failure. What appeared to be the most satisfactory explanation to reconcile Dr.Chase's theory with this item in assuming that the plate of 100 subjects was divided vertically by a wide margin and that 50 subjects were arranged on either side of this margin. No such arrangements which would meet other facts regarding the plate or plates could be worked out. The most likely such arrangement, viz, that the 100 subject plate consisted of two panes each containing 10 horizontal rows of five stamps at either side of the dividing margin conflicted with the fact that an unsevered horizontal strip of six stamps was known to have been in existence within recent years.

Only one logical possibility remained: the plate must consist of two panes, side by side, each containing 100 stamps in ten rows of ten; the two panes being seperated by a wide blank margin. This conclusion perfectly accounts for all the statements regarding the plate, or plates, of the 10¢ stamp of 1847 which unquestionably can be demonstrated as facts. It perfectly explains why there are two lower right corner quite different from each other,

(No.100L and No.100R) and is the only arrangement which reconciles perfectly with the copy from the McDaniel collection. As the work on the plate progressed it became more and more evident that the true solution of the problem had been reached, and that there was only one plate of the 10¢ stamps.

It does not seem likely that the first plate of the 5¢ denomination would differ from that of the 10¢. The reason which impelled the contractors to make a large double plate of the 10¢ stamp, would probably apply with even greater force to the 5¢. Conclusions may be drawn from Dr. Chase's own statments regarding the 5¢ stamps which indicate that the two plates of the 5¢, each containing 100 subjects, which he states were in use concurrently from the early printing in 1847 until late in 1850, were in fact one plate containing two panes. I see no good reason why the contractor should have made and used two seperate plates of the 5¢ concurrently for over three years. It would be far easier for me to believe they used one plate until it was worn out and then made another one. Even had two seperate plates been in use during that period what reasonable chance is there that they would each have been used to exactly the same extent so that late in 1850 they each showed exactly the same degree of wear? The evidence Dr. Chase adduces to prove two early plates of the 5¢ can be employed more effectively in proving one plate. The instant we convert Dr. Chase'a two seperate plates into two panes of the same plate it is no longer necessary to explain the illogical concurrent use and we know why both plates - that is, panes - were equally worn late in 1850. By assuming the first 5¢ plate was a double plate of two panes like the 10¢ plate we can account for all known peculiarities of the stamps from that 5¢ plate and can meet all the statements regarding the earlier printings of the 5¢ stamps which can unquestionably be demonstrated as facts.

In regard to the later 5¢ plate which Dr. Chase called No.3, I cannot at this time state whether it contained two panes or one pane. The small amount of evidence available does not point definitely to either conclusion. On the one hand we have established that the early plates of both denomination, - the 10¢ certainly and the 5¢ probably, - consisted of two panes. On the other hand we have to consider that the later plate of the 5¢ was made only a few months before the expiration of the contract and this may have influenced the contractors to make and use a smaller plate. If and when more than 100 varieties—that is positions—known to belong on this later plate are identified, or if and when two specimens so different that they cannot come from the same position of the same pane but which do come from corresponding positions are found we shall know the later 5¢ plate also contained two panes.

It is quite evident Dr. Chase reached his correct conclusion regarding the earlier plates either from lack of suitable material - which is probable, or from incorrect observation - which is improbable, - or from attempting to reconcile what the stamps revealed with the only statement which has come down to us regarding the plates of the 1847 stamps and which his only study of the stamps forced him to admit did not tell the whole truth, even if it were partly true. My own belief is that this statement is even less worthy of credit than Dr. Chase believed. On page 63 of Luff's book "The Postage Stamps of the United States" we find the following:

"The following orders for stamps were sent to and executed by the contractors:

		5 Cents		10¢ Cents
June 3,1847		600,000	(*)	200,000
Mcn.15,1848		800,000	8 8	250,000
Mct.20,1849		1,000,000		300,000
Feb. 5,1850		1,000,000	ă.	300,000
Dec. 9,1850		1,000,000		
Total.	••••••	4,400,000		1,050,000

"Of these qualities 3,712,000 five cent and 891,000 were distributed to postmasters for sale. A small portion were returned to the Department after the appearance of the next issue. ***

It has been said that the first contract for the manufacture of stamps did not provide, as was done in all subsequent contracts that the die and plates should be the property of the Government. Consequently they were claimed by the contractors. This may explain the anxiety of the Post Office Department to secure the return and destruction of the remainders of the 1847 issue and the forbidding of their future use. That this anxiety was groundless is proved by the following affidavit:

"New York, Dec. 12,1851

"Have this day destroyed dies of 5¢ and 10¢ stamps also the plate of same.1 5¢ stamp plate 100 on 1847 issue. 1 10¢ stamp plate 100 on the 1847 issue.

Rawdon, Wright, Hatch & Edson.

Witness

Wm.Brady,P.M.N.Y.:
John Moor
G.W.Johnson

The reader will note that this affidavit is dated a full year after the date of the last order for 5¢ stamps, nearly two years after the date of the last order for 10¢ stamps, and nearly six

months after both denominations had gone out of use. As it was customary to maintain a supply equal to about three months requirements on hand the date of the affidavit is probably not less than nine months later than the last printing of the 5¢ stamps and may be fully a year and a half later than the last printing of the 10¢ stamps. During such a long period many things might have happened to those plates. Possibly they were cut in two and at the date stated in the affidavit only half plates remained. Whatever happened, it is certain this affidavit does not cover all the plates used for the 1847 series. Whether it states what was the literal truth at the time it was dated or not, it does not tell the whole truth regarding the 1847 plates and therefore is not entitled to full credit. The original affidavit may have been incorrect or an error may have been made in copying it. The later plate of the 5¢ may have contained only 100 subjects and only one half of the 10¢ plate may then have been in existence. Whatever the affidavit means the reader may be certain that at the time the stamps were printed the 10¢ plate at least contained 200 subjects.

<u>Dr.Chase states, (Philatelic Gazette, page 204):</u>
"As yet it is impossible to assign copies of the 10¢ stamp to either plate.

"From the fact that all the stamps making up certain strips and blocks turn up often, while others (equally distinct varities) from other strips and blocks are very rare, it seems a fair conclusion that one 10¢ plate was used much more than the other. Why one plate seeming was destroyed some time during the life of the issue is not known, but the strongest probability is that the plate became cracked or otherwise damaged."

The present writer's experience directly contradicts this statement. In examining more than 1,000 copies of the 10¢ stamp he fails to note any marked difference in scarcity between those from the left pane and those from the right pane - which, of course, correspond to the two plates discussed by Dr.Chase.

Going back to the plating itself: - being immensely encouraged by the discovery that there were two panes of the 10¢ plate and not two seperate plates and that the margin at the left of the McDaniel copy was copy was the connecting link between No.10L and No.1R on the double plate, and being further encouraged by Mr.Ackerman, who wished to have his exhibit in London reveal as much new philatelic knowledge of the 1847 stamps as was possible, I proceded with the work of identifying the different varieties of the 10¢ stamp and attempt to locate them on the plate. I discovered that the middle stamp in a vertical strip of three from

the Chase collection. (Nos.10L - 20L - 30L), was identical with the end stamp at the right in a strip of five which came to the Ackerman collection from another source, (this is on the well known cover owned by C.F.Rothfuchs for many years), and this strip therefore was Nos.16,17,18,19,20 in the left pane. Mr.Ackerman had also obtained a square block of 16 proofs from the original plate which I suspected of being Nos.22 to 25R, 32 to 35R, 42 to 45R and 52 to 55R. Afterwards this suspicion was found to be correctly based. This piece had formerly belonged to the Earl of Crawford and at the time of writing is the largest block of original 10¢ proofs known to me.

A tentative partial reconstruction of the first vertical row of the right pane viz., Nos.1,11,21,31,41,51R, soon followed although positive proof of the positions of some of these stamps in the row did not come until some time later. In his articles Dr.Chase states that the two shifts with the line in the "X" occupy positions Nos.1 and 2 and that the "Post Office" shift comes directly over the shift with the double frame line at the bottom in the vertical row of the same plate. My plating thus indicated and later established that the four shifts were Nos.1, 2,31 and 34 in the right pane and that a block of ten stamps from the upper left corner of the right pane could include all four shifts.

Through the kindness of Mr.Joseph T.Lozier who loaned me his unused vertical strip of four further progress of great importance was made. This magnificent piece has sheet margins at the top and left and must therefore come from the upper left hand corner of the pane. But as the four stamps which comprise this strip do not all agree with the stamps which I was certain were Nos.1,11,21 and 31 of the right pane it was obvious this strip must belong in the left pane and consist of Nos.1,11,21 and 31L. At that period in the work I had proof that the plate contained two panes and had a group of stamps definitely located in each pane from which the remainder of each pane might conceivably in time be reconstructed.

From then, however progress was much slower and I soon realized that although the Ackerman collection contained between 300 and 400 of the 10¢ stamps including many pairs and strips, there was very slight possibility of making a complete reconstruction of a plate containing 200 subjects without much additional material. Therefore my efforts were largely consontrated on classifying the varieties as rapidly as they could be identified and when a variety was identified but its position on the plate could not be located it was given an arbitrary name consisting of a combination of two or three letters - "DUB," "TNT," "AEF," ect. This work continued through April and on the voyage to Liverpool

from April 28th to May 7th. When London was reached 125 distinct varieties had been positivly identified and about 50 others, some of which later proved to be duplicates were partially identified. At that time the position of only about 50 of these varieties had been definitely located on the plate, but not less than seven of the eight corner stamps had been identified and all but two or three of the 20 stamps which make up the right end, (10th) vertical rows of the two panes. When shown at the exhibition the collection contained positive proof that the 10¢ stamps were from one plate of 200 subjects, laid out in two panes side by side.

After my return from England in June, 1923, I began to solicit the cooperation of other collectors who had specimens of the 10¢ stamps, particularly pairs, strips, and single copies which had abnormal margins. The response was immediate and whole hearted and the work progressed more rapidly than I had dared to expect. At one time during the summer the number of varieties which I had then identified were counted and the total was discovered to be 212! This rather surprising result, together with certain peculiarities regarding some of the varieties, led me to consider the possibility that in addition to one plate of the 10¢ containing 200 subjects another 10¢ plate might also have been used. As more material was submitted for examination, however the excess varieties were gradulally found to be duplicates of other positions and again I became certain there was only the one plate, of 200 subjects. If it is possible to identify all of these - and all but a very few of them have already been identified - the reader may be certain that the number of plate varieties of the 10¢ 1847 is but very slightly in excess of 200. The reason there are any excess varieties has no bearing on the construction of the plate. Each one of these excess varieties comes from the same position on the plate as one of the 200 "regular" varieties and was caused by something accidentally happening to the plate after an undetermined number of sheets had been printed. In a few instances stamps from certain positions differ in later printings from stamps from the same position in earlier printings. In this sense there are two or perhaps more - states of the plate.

GUIDE LINES AND POSITION DOTS

When the 10¢ plate was ready for the transfer press very fine horizontal lines were drawn on it paralled to each other and so spaced that the distance was equal to the hight of one stamp design plus the amount of space determined upon for the margin between any two stamps vertically. Small dots were marked at intervals along these lines; the intervals corresponding to the width of one stamp plus the amount of space determined upon for the margin between any two stamps horizontally. Between the 10th and 11th vertical row of these dots a much wider spacing was made and this space became the margin between the right and left panes. The lines were really fine scratches on the surface of the plate and the dots were slight depressions in the surface of the plate and may have been made by the point of a small hand punch. The dots were intended to come directly under each other in vertical rows and probably were spaced off with calipers or similar compass like instrument. In later years it was customary to draw both vertical and horizontal guide lines on the plate and the dots were placed where these lines crossed, thus tending to make more perfect alighnment of the stamp impression.

I have found no traces of vertical lines drawn for this purpose on the 10¢ plate and the somewhat irregular alignment of the stamps indicates such lines were not used. A possible exception may be made, however, along the outer edge of stamps in the four marginal rows, viz., the first, tenth, eleventh and twentieth vertical rows on the full plate. Many of the stamps in these rows definitely show parts of fine vertical lines which may be either continuous or dotted and although in many places they are invisible because they coincide with the frame line of the stamp, in other places they may be found close to the outer frame line, either just inside or just outside this frame line, or connecting the adjacent corners of two stamps vertically. In no case do these vertical lines run through the position dots and apparently they served to define the right and left edge of the parallelogram which the 100 stamp designs forming each pane of the plate finally occupied. Possibly they were used as a guide from which to measure off the dots. Traces of fine vertical lines rarely found in a few other places on the plate may be attributed to an accidental cause.

The purpose of the dots was to enable the operator working the transfer press to adjust the transfer roll in the correct position for transferring each stamp design and are therefore called position dots. Normally each stamp has one dot which may be be found near the middle of the left side of the stamp in, or

very near the space between the middle and upper segments of the trifoliate ornament. This ornament is found about half way between the top and bottom of the stamp between the oval containing the vignette and the edge of the background inside the vertical frame line which forms the left edge of the stamp. When the small needle or pointer fastened to the transfer roll was brought into such a position that its point rested in one of the position dots the transfer roll was correctly placed so that the design transferred from it would be rocked into the correct position on the plate. Quite obviously the dot on any stamp could not have been used to rock in the design from which that stamp was printed because both the pointer and the roller could not occupy the same space at the same time. In order to serve its purpose the pointer must be at the side of the transfer roll and thus it is clear that the position dot on any stamp served to locate the design of the stamp beside it on the plate. For this reason the first vertical row of stamps in each pane has no position dots and a vertical row of these dots is found in the margin outside the last vertical row of stamps in each pane. The position of the stamps in the first vertical row of each pane was determined from the position dots which are found in the stamps in the second vertical row and the position of the stamps in the last (10th) vertical row of each pane was determined from the position dots in the margin outside that row of stamps. The distance from the right frame line of the stamps in the 10th vertical pane to the position dots in the adjacent margin will be approximately equal to the distance from the right frame line of any stamp on the plate to the position dot on the stamp to its right.

The reader should bear in mind constantly that the relative position of the stamps on the sheet is always reversed in comparison with the relative position of the design on the plate from which they were printed. The first vertical row of the stamp designs on the plate produced the last vertical row of stamps on the sheet and vice versa. Supposing the stamp designs were rocked into the plate in "normal" position, i.e. with the tops of the stamps toward the top of the plate, the workman would have commenced with the vertical row of designs at his right and entered that row, and then the next row, and so on moving the transfer roll one row toward his left as each vertical row was completed. The pointer would have been on the left of the transfer roll. If however, the position of the plate in the transfer press was upside down with relation to the workman's position he would have started at the left and moved the transfer roll to the right as each vertical row was completed and the indicator would have been on the right hand side of the transfer roll. But whatever may have been the position of the plate in the press the first vertical row of stamps at the left side of the pane was produced from the first row of stamp designs entered on the plate and the last (10th) row of stamps on the pane was produced from the last row of stamp designs entered on that pane. Presumably the left pane on the plate which corresponds to the right pane on the sheet was rocked in after the other pane had been entered.

If the distance between the horizontal guide lines on which the position dots are located is correctly spaced, and the position dots are correctly spaced along the guide line, and no variation occurs in locking the transfer roll in position with the point of the indicator in the guide dot, the result will be a perfect layout and the stamp design will occupy the exact positions intended for them. However, there are three "ifs" to be overcome and in practice the conditions required by at least one of these "ifs" were not perfectly met, hence we find variations in the relative positions of the stamps. Some are nearer together or further apart than others, either vertically or horizontally and the design may even be noticeably out of perpendicular. These variations from the intended true position of the stamp designs have the effect of moving the relative position of the guide dot on each stamp a trifle higher or lower, or to the right or left. Variations between the relative position of the guide dots and parts of the stamp design, together with variations in the shape and size of the dot itself are often extremely helpful in identifying the different varieties and in locating the position of these varieties and in locating the position of these varieties on the plate. Such variations are not always perfectly conclusive because the shape of the dot and its size may vary noticeably on stamps from the same plate position, but the relative position of the dot to adjacent parts of the stamp design from the same plate position cannot vary.

Some stamps show more than one guide dot. These are possibly the result of the workman making a slight correction when marking the dots or may possibly come from the indicator point on the transfer roll making a mark on the plate close to the dot instead of resting exactlt in the dot. On one horizontal row of the left pane the workman evidently corrected the position of the guide line and when the guide lines were burnished off the plate before the designs were transferred sufficient care was not used to remove all traces of the guide lines and parts of them may be found on several of the stamps in this row as two very fine horizontal lines close together. In another position on the plate the stamp shows a comparatively heavy horizontal line crossing it which under a strong glass is seen to be two very fine lines close together. In this case the amount of correction is so slight that it

seems more likely the double line came from a marking tool which instead of having one fine point had a point so shaped that it inscribed two fine lines very close together. A number of other stamps on the plate show more or less pronounced traces of a single guide line. These are most noticeable crossing the right cheek of the portrait.

The variation in the relative position of the stamps to each other is not great and was of little help in plating. Differences in the shrinkage of the paper, which affects both the size of the stamp impression and the width of the valleys between them make it unsatisfactory to rely to any great extent upon variations in the distance between the stamps.

the fact that the plate contained at least one position dot for each subject on it is excellent evidence that the stamp designs were rocked in from a single relief. This conclusion is supported by the variations in the alignment of the stamps. No tangible evidence indicating the use of more than one relief has been noted. Possibly there were two or more reliefs on the transfer roll, but if so, they have not been distinguished and they were used one at a time and not — as so frequently in the 1857-60 series — in multiple.

RECUTTING

Before any stamps were printed from the plate it was gone over by hand and parts of the stamp designs were "recut" - that is, strenghtened or deepened with a hand engraving tool in the same manner that the parts of the die engraved by hand were originally engraved. The purpose of this recutting was to strenghten the outer line which frames the stamp on all four sides. On the die the line was rather thin and probably was damaged either in transferring from the die to the transfer roll or else on the transfer roll. There were several pronounced breaks which are particularly noticeable on the sides. Stamps from many positions on the plate show these weak or broken frame lines. All the stamp designs on the plate were recut to some extent but if this recutting was done anywhere except on the frame line I have found no satisfactory evidence of it. All four frame lines were not completely recut on every stamp design and this fact together with variations in recutting of corresponding lines on different stamps make identification of stamps from the 200 positions on the plate possible.

The bottom frame line was either recut least of any or else was the most carefully recut, for it shows the slightest variations. The top frame line was recut always, or nearly always. On some stamps the side frame lines were entirely recut, on other stamps only one of them was recut, and on still other stamps the

recutting was only partial on one or both of the side frame lines The recut lines may be identified by their heavier appearance, lack of uniformity, crookedness, doubling, splitting, and other peculiarities. The recut top lines are often heavy but are usually straight and unbroken. The greatest variation is found in the side frame lines and many stamps can be identified even though the top, right and bottom frame lines are cut away because of the many differences in the left frame lines and the fact that the position dot comes at the left side of the stamps. In some instances recutting of the frame line stopped just short of the corner so that where the two lines forming the corner came together they were not properly joined. In other instances the recutting was carried a trifle too far and the recut line extends bejond the corner of the stamp. Such instances are practically always vertical and may occur at any one of the four corners or rarely at two corners of the same stamp.

Another very noticeable pecularity on some of the stamps is found in the area above the upper part of the medallion. The engraving here appears lighter, i.e. "fainter", than elsewhere on the stamp. Stamps from various positions have this characteristic in varing degree - some very slightly, others very noticeably, and owing to this variation it is hardly possible to state on just how many positions it occurs. Perhaps I might state that it is very pronounced on about ten positions and less pronounced, though quite noticeable on about fifteen other positions. This variety is often called "short transfer at top" but Dr.Chase states (Philatelic Gazette, 1916, page 201):-

"It seems very improbable that this is a 'short transfer'. It was most likely caused by carelessness in the process of 'cleaning up' and burnishing the plate. This 'cleaning up' consisted largely of removing the rough burn at the top and bottom of the design, made up of the metal displaced by the action of the transfer roll."

This explaination is more satifactory than that of short transferring because the latter means the transfer roll was not rocked as far toward the top of the stamp design as it should have been. The theory of short transferring to account for the peculiarity noted is open to serious objection. It is difficult to understand how the transfer roll could have produced satisfactory results unless it was a true cylinder and if it was a true cylinder the effect produced by failing to rock it as far as it should have been rocked at either end of its swing would be approximately equal along any imaginary line crossing the stamp design at right angles to the direction of the swing.

The depth to which the raised lines of the design on the relief would be impressed in the plate in any case of short trans-

ferring would depend upon their distance toward the top - or bottom - of the relief from an imaginary horizontal line passing through the points of greatest contact on the plate. In other words, if a horizontal line were drawn across the middle of any stamp design and another line paralled to the first was drawn through the upper part of the stamp, parts of the design in the area crossed by the second line would be equally strong of equally faint at all points along that line, provided of course, the depth of the lines of the design in the original die was approximately equal. With the so-called short transfer, the fainter area which is their characteristic is not equally faint along such an imaginary line, instead, it is most pronounced near the middle of the upper part of the stamp between the letters "U" and "S".Parts of the design around and outside those letters are much stronger and are as strong as anywhere else on the design.

Dr. Chase's theory that the fainter areas were caused by carelessness in burnishing the plate is more satifactory but also may be open to question. If we accept it as the true solution we are also compelled to believe that the workman who was reasponsible for it was strangely methodical in his carelessness. Although the result of his carelessness are found here and there all over the plate he never burnished away any part of the design at the bottom of the stamp - invariably he selected the top of the stamp design when carrying the burnishing process to excess. Stamps from certain positions on the plate, however, do support Dr. Chase' s theory in a rather striking way. They have pronounced "short transfers" and also have their top frame line strongly recut. Nevertheless, parts of these frame lines are just as faint as adjacent portions of the design. To me this seems conclusive evidence that the cleaning up and burnishing took place after the recutting and therefore that it may account for some of the "short transfers". It may well be that for some reason which we do not yet understand little or no burnishing was required at the bottom of these stamps and this being so, the workman would be careless at the tops of the stamp designs only because he burnished only at the tops.

PLATE MARKS

In addition to the various peculiarities already noted such as variations in the location of the position dots, variation in the recutting and "short transfers", it is possible to identify many of the varieties by certain marks which in all probability got on the plate accidentally, but which being depressions in the surface of the plate somewhat similar to the lines which formed the stamp designs often held the ink and were reproduced on the

stamps. Most of these marks are either scratches, dots or blurs of color and they vary greatly in their intensity. Some are very plain and can easily be detected by the naked eye; others are so faint they cannot always be detected even with a strong glass. When such marks occur frequently on stamps from the same plate position they must have been on the plate itself and therefore are termed "constants". They are of great assistance in plating. Other marks which may readily be seen but which do not occur frequently on stamps from the same position are termed "variables". Their presence serves only to make the plating more difficult. Careful examination of almost any 10¢ 1847 stamp will reveal breaks in the frame lines or other places in the design which should be black but where no ink appears, and also tiny specks or even considerable blurs of ink where no ink should be. In many instances such marks or peculiarities are variable due to imperfect printing or else happened after the stamps were printed and therefore are of no assistance in plating.

Except the position dots and portions of the horizontal guide lines which through carelessness were not removed from the plate very few of the stamps have any marks in the main portion of their design by which they can be differentiated. On over 95 per cent of the stamps the identification marks — other than the guide lines and position dots — are found either between the body of the design and the frame line, are variations in the frame line, or are found in the margin outside of the stamp. Scratches, dots and blurs of ink in the margins or valleys between the stamps were usually caused by marks on the plate and therefore are quite apt to be constants and helpful in plating.

Since a stamp plate may become scratched at any time and since scratches present on it when it first goes to press may be so faint that they soon wear away it is evident that the term "constant" does not necessarily mean every stamp from any certain position on every sheet printed will show every mark termed a constant for that position and no other marks. Each such stamp might not show every such mark even if all the impressions were perfect. Each printing refelts the condition of the plate at the time when that printing was made but modified by the quality of the press work. Hence the earlier printings will show marks produced by scratches that were on the plate when it was first put to press but will not show marks from scratches that got on the plate after it had been in use for a time. A stamp from position "X" might show a faint scratch in the early printing. Later it might also show another and deeper scratch which was not on the plate when it was first put to press. Finally, the last printing might show only the deeper scratch because the wear of the plate had obliterated the fainter one. Both of these marks would be termed

constants although they would not both be found on all stamps from "X" position.

Only a few more than 5,000 impressions were taken from the 10¢ plate. This very limited use did not cause any noticeable wear and most of the scratches and marks that were on its surface when it first was put to press remained through the last printing. Other marks did get on it after the first stamps were printed and before the last stamps were printed and the presence of these "part time" constants considerably complicate the plating problem. Their presence also makes it impossible to identify and locate all the varieties of the 10¢ 1847 that may exist without examining each and every copy in the whole world.

If these later marks all got into the plate at the same time we would have two definite states of the plate, viz., early and late, but if they did not occur at a time when the plate was being cleaned or were a result of some other process or accident affecting the whole plate, but merely happened to one stamp design at one time and to another stamp design at another time, the terms early and late can only refer to the particular design mentioned. The number of stamps from different positions which I have found in both early and late states is far too small to convince me there were two well defined states of the whole plate.

There is one very odd similarity between the 10¢ plate and the first 5¢ plate. On that 5¢ plate there is a noticeable dot of color in the upper curve of the "S" of U.S. on all the stamps in the 9th vertical row of the panes. On the 10¢ plate there is a similar dot in the margin between the tops and bottoms of several of the stamps in the 9th vertical row of the right pane.