I'VE BEEN WORKING ON THE RAILROAD¹

TT IS only when I am in a group such as this that I again feel reassured that my chosen profession is entirely legitimate and thoroughly moral. The repeated use of the terms "archives" and "archivist" on the printed program of this annual meeting is indisputable proof that the profession no longer requires long involved and apologetic explanations. It has not always been so. Exactly two years ago this morning I joined the staff of the Denver and Rio Grande Western Railroad as archivist with but one instruction from the trustees of the road, "to establish an archive and long-range record program for the entire system." I must admit that as I stood in the inner sanctum which was the office of the trustees and received a small blue card entitling me to free passage over all portions of the railway, a copy of the four-inch thick Manual of Procedures weighing approximately five pounds, and a key to what was to be my office, I felt some strange qualms. The academic pattern of the years immediately preceding that morning two years ago seemed to have but little similarity to the pattern of my new surroundings.

I left the trustees' office and made my way to the twelve by fourteen foot office on the fifth floor of the Sanford White designed Equitable Building in the heart of Denver's business district. It is impossible to describe those first few moments sitting at an empty desk set in the middle of an uncarpeted floor of that otherwise completely barren room. A telephone company employee came in and placed an extension phone on the desk, remarked about the vaultlike atmosphere of the room and unceremoniously departed. Several minutes later a sign painter stopped in front of the opaque glass panel in the door, surveyed the situation, and then began to inscribe thereon "D. & R. G. W. R.R.," and below it in heavy black letters the startling word "Archivist." A number of people stopped to watch the operation, only to leave with an expression of deep bewilderment on their faces. By mid-afternoon the janitor had brought me a waste basket and the building superintendent had trundled in a work table and a four drawer wooden file cabinet of dubious vintage. Things were definitely looking up. I had just begun to glance through the ponderous Manual of Procedures when the door suddenly opened

¹ A paper read at the annual meeting of the Society of American Archivists, Princeton, New Jersey, November 15, 1943.

and in walked a gentleman whose presence on the same floor I had noted earlier in the day. "I just wanted to see what a self-confessed anarchist looks like," he announced and then promptly withdrew without waiting for any reply. A few moments later an elderly gentleman came in and shook hands, explaining that he was a member of the firm of attorneys whose offices adjoined mine. "I must admit," he remarked, "after reading your title on the door we had to refer to the dictionary to find out just what kind of an animal the railroad was placing on this floor. We have seen a number of changes on the Rio Grande in the forty years we have been in this building, and a number of unusual officials have come and gone including receivers, referees in bankruptcy, trustees, etc., but an archivist was something new." Such was my introduction to what my university colleagues frequently refer to as "the business world."

I wish it were possible in the brief time at my disposal to give you a running account of my varied and unusual experiences during the past two years. Frankly, I must admit that my own education over this period must far outweigh any contribution I may have made to the road. It is not my intention in this paper to bore you with the technical operation of a railroad archives since it is manifest that the techniques are generally the same as those utilized in other progressive despositories, with such adaptations as specific situations require. The purpose of this paper, therefore, is to discuss the types of records and their value, together with some of the record problems encountered in our work and to state how they were met. You will note that I have carefully avoided the use of the word "solved," as only time will prove whether we "solved" our problems or merely "met" them.

In his Political and Social Growth of the United States, 1852-1933, Professor A. M. Schlesinger declares, "The history of the time might almost be written in terms of railways." While in an economic sense this statement is generally true throughout the West, it is particularly valid when applied to the Rocky Mountain region. It is unfortunately true, however, that very little use has been made of the tons of railway records, which, in many cases, constitute the fundamental source material for the writing of the local and regional histories of the West. The work of Paul Gates on the Illinois Central, Richard Overton on the Chicago, Burlington, and Quincy, James B. Hedges on the Northern and Canadian Pacific railroads, plus a

few biographical monographs on leading figures in the rail industry, constitute almost the entire range of basic studies in this field. It is true there are a great many other studies which treat of the railroad and its place in the development of the nation. Some of these are well written and sound, but an analysis of the bibliographies of such works will show that the sources used and quoted are almost entirely local and federal government documents, investigations, newspaper articles, financial reports, and controversial publications issued in support of, or attacking, regulatory measures. The number of references to original railroad sources in a famous text on western railroads is exactly nine, and yet this book is the basis for innumerable courses in history and transportation. It is not surprising in view of this condition that our general concept of railroad history is filled with misunderstandings, inaccuracies, and, in many cases, unjustifiable bias.

It must be frankly admitted that this situation is not wholly the making of the historian. The railroads have been, and in some cases continue to be, reluctant to permit the use of their records. This attitude is frequently based upon unfortunate experiences in the past, or upon false premises, but more often than not upon the fact that railroad records are so dispersed, and in such condition, that even the employees of the road are unable to locate without great difficulty the records desired by a specific researcher. Secondly, the vast bulk of railroad records have been in themselves a deterrent to the historical scholar. I am reminded of the story of a Midwestern professor who sought to make a study of the effect of railroad rates on the production of grain in his state. He approached the officials of the most important road in the region and received their permission to use the company records. Armed with a letter from the vice-president he appeared at the company offices one Saturday morning and politely asked to be shown the rate records and grain shipment records for the period from 1870 to 1890. The operations official to whom the gentleman presented himself read the authorization, shook his head disgustedly and told the professor to follow him. They climbed into a company station wagon and drove to an old roundhouse on the outskirts of town. Once inside the dark, unheated building the economist found himself face to face with a vast collection of several thousand large wooden storage boxes containing literally some sixty million individual documents. The entire collection was poorly labeled and universally covered with a thick layer of coal dust. Although his ardour had visibly cooled, the researcher began his perusal of the first box. After hours of continuous labor he laid aside the last document in that first box. His white shirt was by now more than a "tattletale" grey, his face showed a smear of coal dust from under one eye to the lobe of the ear on the opposite side of his head. He had torn one leg of his trousers and his left thumb throbbed from being struck sharply by the hammer while prying off the lid of the box. In the four hours he had made but one note on the thick pad of research cards with which he had thoughtfully provided himself before coming to work. It read, "next time wear coveralls." That note must have been penned during the early part of his labors, however, for there was no next time. The professor has not returned!

It is clear that the western railroads have accumulated vast quantities of records for three reasons: first, because they were required in the regular operation of the railroad; secondly, because the carriers were required by Interstate Commerce Commission regulations to preserve various types of records for specific periods; and, lastly, because in many instances no regular procedure was provided for the disposal or destruction of noncurrent records, and, lacking authorization to make such decisions, records personnel merely sent the accumulated files to storage.

In but few, if any, instances, did the railroad companies give any specific thought to the historical value of their records. That a number of the more progressive carriers have now taken this fact into consideration is due almost entirely to the foresight of such executives as Mr. Henry Swan and Judge Wilson McCarthy, trustees of the Denver and Rio Grande Western Railroad, and to Mr. Ralph Budd, president of the Chicago, Burlington, and Quincy Railroad. A few noted historians, archivists, and librarians have also contributed to this rapidly increasing consciousness of the potential value of the documents in railroad record depositories. Included in this latter group are such noted figures as Drs. Cunningham and Merk of Harvard, Dr. Arthur H. Cole, Librarian of the Harvard School of Business, Dr. Stanley Pargellis of the Newberry Library, Dr. James B. Hedges, and Mr. Richard Overton. Behind this consciousness of the importance of railroad archives is the realization that the American railroad industry has been much more than a producer of transportation. In the records of their construction, financing, extension, and development are to be found the primary sources for a large part

of the economic, social, and political background of the local areas, states, and regions through which they operate. This fact can be easily seen by referring to the records in the archives of the Rio Grande. We are able to trace the land settlement patterns of a large part of the Rocky Mountain area from 1870 to 1900, and to see the result of extensive domestic and foreign land and colonization programs instituted by the railroad. The development of such natural resources as coal, iron, copper, silver, and gold deposits, of agricultural and pastoral areas, and of health and resort locations are clearly discernible. In the executive records of the period from 1877 to 1903 are the original documents of the Jay and George Gould machinations—of the attempt to gain control over an entire industry through the co-ordination of the operations of a number of railroads in order to form a single system from New York to California. One large group of records clearly portrays the material interest of British and Dutch capital in the founding and development of the railroad and its land, agricultural, mineral, and industrial enterprises. The political aspects of railroading can be seen in files and other records initiated during the Granger movement and the Bryan silver campaigns. In this latter connection we were fortunate in obtaining the correspondence between President Charles E. Perkins of the Chicago, Burlington, and Quincy Railroad and United States Senator Edward Wolcott, who was also chief counsel for the Denver and Rio Grande Western Railroad. These papers trace in detail a large part of the strategy employed to defeat Bryan and his program. The social aspects of the railroad archives are beyond listing. In the mere act of founding towns, promoting immigration both by individual settlers and by colonies, in providing for schools, churches, colleges, parks, hospitals, and other institutions, the railroad became an important contributor to the development of social patterns which, while at times perhaps of doubtful merit, were in the main the foundation for present institutions, attitudes, and relations in the West. Tax records of railroads are vital to the economist tracing the founding and growth of communities in our western states. In 1942, in a southwestern state one railroad paid between sixty and seventy-five percent of the total property taxes in the counties through which its rails were laid. The employment and labor records of the Rio Grande, as on almost every road, are detailed and complete for almost half a century. Here is the largest existing collection of primary source

material for studies of labor development and labor policy that may be found in the United States. There are, of course, vast quantities of records dealing with the development of the railroad and its equipment, rate policies, traffic, financial history, and relationships to government and other businesses. A considerable body of executive records show the background for certain policies adopted by the carriers—policies or actions which in some instances have been highly condemned by the public, but which the records clearly show had some logical basis from the point of view of the carriers, a point almost universally neglected by the historian and economist.

It is certainly evident from this brief and incomplete recitation that the vast quantity of official railroad documents now found in storage buildings, unused roundhouses, basements, attics, abandoned station and yard buildings, and in the record rooms of almost every American railroad constitute one of the most important unused reservoirs of source material for the history of this nation.

The condition of these records, however, are such that they are practically useless to the ordinary researcher who can devote only a limited time in the field because of other commitments. This, then, is where the archivist logically fits into the railroad record picture. It must be his job to literally clean up the mess, restore order to the records, provide finding aids and guides, and of greater importance, educate railroad officials to good current record practices, for it should be obvious that the methods and policies under which records are created must perforce directly effect the quality, efficiency, and value of the archive depository into which such documents are placed when they become noncurrent. Through the foresight and judgment of Judge Wilson McCarthy and Mr. Henry Swan, co-trustees, and General Manager E. A. West, a program with this aim was instituted on the Denver and Rio Grande Western Railroad two years ago.

Our first task was to make a survey of the record situation existing over the entire fifteen hundred miles of the railroad throughout Colorado, New Mexico, and Utah. It was a survey I shall never forget. The Rio Grande is, in fact, two railroads within one, the first being an engineering marvel running from Denver over the Rockies, through the six-mile Moffat Tunnel, along the Colorado River and on to Salt Lake City. An equally important alternate route of this same line runs from the iron and steel manufacturing center of Pueblo through the Royal Gorge of the Arkansas River, and over

the 10,239 foot Tennessee Pass joining the first line at Dotsero on the Eagle River. The division which is in fact a second railroad within the system is the 606 mile narrow gauge road which after leaving the division point of Alamosa, in the San Luis Valley, continues south and west over the 10,015 foot Cumbres Pass, and through the Apache Indian Reservation in northern New Mexico to Durango, Colorado, near the famous Mesa Verde National Park. Over these main lines, branches, cut-offs and spurs, in the cabooses of freight trains, in the cabs of steam engines or the fast new diesel freight locomotives, or in the prosaic but more comfortable Pullman car, we toured the line, learning what it is that when added together makes up a first class American railroad. Records were everywhere, in every station, telegraph office, section house, repair and machine shop, roundhouse, superintendent's and yardmaster's office, and in three different storage departments in Denver.

The records in storage showed the result of years of depression and the consequent financial starvation of file rooms throughout the system. The lack of a comprehensive archive policy was also evident. Wooden boxes were crammed with records from which folders, clips, staples, guides, and other file supplies had been removed and the records piled in meaningless heaps. In some containers six-inch stacks of records were fastened together with binders glue, while in others mammoth staples, some actually twelve and fourteen inches in length, held several hundred documents. One depository became the bane of my existence. It was located in a part of town which during the winter months is heavily blanketed with coal smoke. The windows and doors of the depository were in such condition that within three or four days after the record rooms had been thoroughly cleaned, a new layer of coal dust blanketed the entire building, record cases and all. To make matters worse some archival gremlin had located the coal furnace and boiler in the huge room in which the records were stored. Naturally the open coal bin was placed next to the furnace. The resulting accumulation of coal dust was the smallest part of the difficulty. The same little gentleman with the cloven hoofs and spear-pointed tail who took care of the coal dust also saw to it that at least once every two or three weeks the boiler would blow its safety valve and turn loose a flood of water which soon covered the entire floor to a height sufficient to permit it to seep into dozens of storage boxes before the situation could be remedied. Water-soaked,

coal-dust streaked documents by the thousands are not novel to the archivist, but I have yet to find one who waxes enthusiastic over the prospect of working with them. After the fourth inundation in three months the custodian of the depository swore everyone to secrecy to prevent my hearing of the fifth catastrophe.²

After completing our survey a two-fold noncurrent record plan was prepared and approved by the trustees. At the outset it was decided to assemble a collection of documents of purely historical value dealing with the founding of the road and including all phases of its development from surveys, construction, equipment, and train movements to finance, land settlement and colonization, mergers, inter-line relationships, and executive control and policy. This historical collection was to include every type of documentary record including photographs. Secondly, a program was instituted for the care, housing, and preservation of the noncurrent records of the company which included a microfilm project and the establishment of an adequate disposal system. It would be foolish for me to pretend that the suggested program was adopted and put into effect without question or opposition. Microfilming was an innovation which required a good deal of selling, and I am happy to say that with the approval and support of another speaker at this annual meeting, Mr. Clyffe Crandall of the Interstate Commerce Commission, we were able to institute a program by which more than twelve-million noncurrent accounting records of no special historical significance (but which federal regulations required us to keep for periods ranging from three to fifteen years) have been microfilmed and the original papers destroyed. Thousands of feet of storage space have been freed by this operation, and, what is of greater importance, we are now able to find and use any microfilmed record within a few minutes. It had previously taken from two days to a week to find certain types of noncurrent documents. It may interest you to know that from October, 1942, to July 1, 1943, our microfilm division cleaned, sorted, arranged, and photographed 2,958,000 waybills, 1,681,000 interline shipment records, 910,000 station documents, 337,500 personal injury claim papers, 1,785,500 freight claim records, 72,500

² It should be realized that this condition resulted from years of neglect and financial stress. The trustees, since their appointment in 1935, have made remarkable strides in correcting such conditions, as proven by the development of a permanent records program with an adequate budget and trained personnel.

troop and main-train movement files, 995,000 bills for vouchers, and 661,500 passenger and car service accounting records. Our total labor, equipment, and material cost for handling and filming ten million records has averaged twenty-two cents per hundred documents.³

This phase of our activity employs thirteen persons and of necessity operates in three eight hour shifts, twenty-four hours a day, six days a week. The backlog of over fifty million documents in the accounting division alone, plus the monthly accumulation of a quarter of a million new records in that one department, added to a long waiting list of other departments desiring to microfilm their non-current documents, has made necessary this strenuous schedule. I cannot help but recall the opposition to the microfilm program when it was first proposed. The head of the very department who originally was the most vocal in his objections is today the strongest advocate of the program.

There are, of course, a vast number of vital records which are either unsuited to microfilming, or which we are required by law to retain in their original form. Through the co-operation of the various department heads this accumulation has been greatly reduced by the disposal of unnecessary materials within these files, and by the introduction of good record practices in their housing, care, and preservation. Please don't misunderstand. We have neither installed all the latest equipment nor all the steel shelving and supplies we might like to have in our record storage depositories, but I can say that coal dust no longer seeps through the doors and windows, and the boiler no longer inundates the record storage room. Current finding lists and adequate labeling have also improved the operation of this noncurrent record division.

The assembling and organization of the historical collection has progressed to such a degree that we are now preparing to publish a formal calendar and index to the more than five thousand individual documents and the fifteen thousand original photographs included in the archives. This collection is made up of letters, diaries, ledgers, pamphlets, orders, and other documents largely assembled from

² This cost includes not only the actual filming, but the preparation of the material for photographing—the straightening, removal of pins, clips, glue, and the repairing of records in such condition that they could not be readily run through the microfilm equipment.

other than official railroad sources.4 From a dusty file room in Wall Street we obtained the original volume of the board of directors and stockholders meetings for the period from 1870 to 1883, and which provided us with one of the most important primary sources of the organization of the railroad. From the files of another Wall Street firm we obtained part of the records of the Jay and George Gould administrations. In a long unused baby carriage in the attic of a century-old adobe ranch-house in the San Luis Valley in southern Colorado there was found the original handwritten telegrams and reports of General William J. Palmer, written at the crisis of the Royal Gorge War between the Denver and Rio Grande Railway and the Atchison, Topeka, and Sante Fe Railroad in 1878-1879. Included with these telegrams was an important collection of Santa Fe railroad documents captured when Palmer seized the Pueblo roundhouse and offices. Members of the various railway operating unions and the families or descendants of former officers and employees have been consistent contributors to the historical collection. Our efforts in this phase of the work have taken us from coast to coast, but we have been amply repaid by the recent opinion of a qualified historian who reported that the collection was the most valuable in the region.

While engaged in organizing the microfilm department and in setting up the historical collection, a situation developed which ultimately led to the adoption of the third phase of our archives program, the establishment of a current records division with a permanent staff whose authority would transcend department and bureau lines. This was in itself an innovation in American railroading. It is traditional on railroads for each department to have its own file room, file personnel, and, unfortunately, its own record system. In nine Rio Grande operating departments in March, 1942, there were as many different record systems in use, and one file room had five separate and distinct index systems to the same bank of file cabinets and still could not readily find its records. It was also true that each department felt its own system was satisfactory and some of the older employees openly resented any effort to change their system. A typical example may be found in the incident that occurred when one of my assistants mildly protested the use of brass staples six

⁴ This work of this division has been under the able direction of the assistant archivist, Mrs. Garnet M. Brayer.

inches long to hold together a single file of papers, many of which were noncurrent. An elderly employee resentfully commented, "We have been doing it this way for thirty years and it was good enough until now." Unfortunately this objection was true. The methods in use were those which, like Topsy, had just "growed." They had been good enough under ordinary peace-time conditions, but conditions in 1942 on the Rio Grande were anything but ordinary. During the year this one road had handled one hundred and five percent more freight traffic and sixty-one percent more passenger traffic than in 1929. To further complicate the problems involved in handling this unprecedented traffic the Selective Service System had already begun to drain off the younger men. This struck directly at the record and file room staffs, and almost immediately the weaknesses of the traditional records system began to prove embarrassing. In one vital file room containing approximately three million records there was a one hundred percent turnover in personnel in less than a month. Three months later this same department was again swept clean. Difficulties developed. It was almost impossible to find the records needed in the everyday operation of the transportation department. The chief file clerk of the department had been in that position for a number of years. He was capable and efficient. Unfortunately, however, the system which he utilized in filing records was one of his own invention and the only index was entirely in his head. No one could find anything in the files but this one clerk, and when he was taken into the army with the specific purpose of handling the records of a newly activitated technical battalion, there was not one person on the road who was able to solve the riddle of his files. In sheer desperation the general manager employed the services of a nationally known file installation company. After more than a month of inspection, the expert sent by the company literally threw up her hands in disgust.

Several days later the assistant general manager called the archivist. He frankly admitted that the situation was so critical that it was threatening to handicap operations of his department, which at the time included particularly complicated and heavy movements of troops and war supplies. His request was simple enough. All he wanted us to do was to reorganize his files, to do it in the shortest time possible, and to accomplish this result without interrupting the routine of his office. As you will immediately recognize this was

precisely the opening needed to effect the program which had been recommended some months before. Our first report to the trustees, made after a general survey of the over-all record situation, had included the statement:

We urge the institution of a system-wide records program which will not only regulate the care, housing and preservation of non-current records, but which will establish a complete procedure starting with the creation of records, their primary filing, their use, and their ultimate disposition. A study designed to eliminate unnecessary duplicating of forms, to standardize the size and quality of paper and ink, quality of carbon paper, typewriter ribbons, file equipment and supplies, and in general to improve the physical condition of records at the time of their creation is urgently needed.

The critical situation in the transportation department resulted in the immediate approval of this suggested program, and the placing of its direction and operation under the archivist. Our department by this time had graduated to an entire suite of offices and an adequate trained staff to handle the greatly enlarged program. We were fortunate in being able to attach to the archives staff a thoroughly trained assistant with experience in the installation of current record file systems and procedures. The trustees and general manager took the revolutionary step by giving us complete authority over all current records throughout the entire system. The result has thoroughly justified this drastic action. In one year the extremely critical situation in the transportation department record room has been completely, and we believe permanently, cleared up. Not only were the three million records in that department reorganized, but an entirely new system was installed, with complete equipment, finding guides and indices. A staff was trained in the system while it was being developed, and to provide for future personnel training a simplified manual was duplicated and distributed to the staff. The current records division is now engaged in reorganizing the records of other departments. Ultimately one system will prevail throughout the road. It will be, we hope, a system which will take into consideration the special problems of each department, but in the main will give a unity of records operation throughout the system. Under the very capable direction of Miss Dorothy Taylor, who now has the title of Supervisor of Records, this current records program has become a vital and permanent link in the general operating procedure of the Rio Grande.

As you have undoubtedly concluded there is nothing startlingly new about the program we have undertaken. Whatever success it has met with must be credited to the splendid co-operation given the archives and records staff by the officers and employees of the departments in which we have worked. During the past year our ego has been somewhat flattered by the number of visitors who have stopped with us long enough to study our records program. Our friends in the National Archives and in the office of the Co-ordinator of Inter-American Affairs have sent a number of Latin American students to observe the techniques and methods we are using. A number of other railroads, libraries, and industrial organizations have also sent members of their staffs to work with us. We are gratified to be able to say that these visits have borne fruit. In October one of Colorado's most important industries, the Colorado Fuel and Iron Company, created a department of archives and appointed an archivist.

The reading of this report on this anniversary and before this distinguished group is my last official act as archivist for the Denver and Rio Grande Western Railroad Company. I can only comment that the past two years have been of incalculable value to me. They have given me an abiding faith in the strength and future of the American system of private enterprise. It is an honor to be able to say, "I've been working on the railroad."

HERBERT O. BRAYER

Colorado State Archives