

# FIRE INSURANCE PLANS

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The advantages of consulting the large-scale town plans produced by the Ordnance Survey are well known to local historians working on the development of urban communities from the nineteenth century onward. Less consulted by historians are those large-scale plans produced for the fire insurance industry by Charles Goad which, it will be argued, provide a major source of information about the changing form and structure of British cities from the mid-1880s onwards. Until recently, Fire Insurance Plans (FIPs) have been unexplicably neglected by urban and local historians in Britain. Even J.B. Harley in his authoritative consideration of *Maps for Local Historians: A Guide to the British Sources* (1972) and P. Rider in his *Record Sources for Local History* (1987) failed to mention the existence of this valuable and intriguing British FIP material. However J. Elliot in his attractive presentation, *The City in Maps: Urban Mapping to 1900* (1987) does stress their importance. In contrast, in North America there is a much wider appreciation of the historical importance and usefulness of FIP material.<sup>1</sup> Indeed it was while at the University of Western Ontario, Canada in 1970 that the present writer first came into contact with Goad's FIPs. At that time the University map collection was being reorganised and amongst the numerous copies of Canadian FIPs one British FIP, a Liverpool sheet, was discovered. Following up that lead, the search led eventually to contact with Charles E. Goad, the founder's grandson. The interest in the British FIPs gained momentum and led on to a much more detailed exploration of Goad's FIPs and a growing conviction that these plans were of great importance to historians and other researchers. In this short essay attention will be drawn to the history, extent and importance of the FIPs for those pursuing research into the history of Manchester in the late nineteenth and twentieth centuries.

In Britain during the later eighteenth century Fire Insurance Plans developed from the specific requirements of the fire insurance underwriters whose pressing needs demanded both an understanding of the physical characteristics of a building to be insured and a consideration of the spatial concentration of policy holders so as to limit an insurance company's losses in the event of a conflagration. These requirements led to the emergence and development of FIPs as distinctive cartographic productions.

From about 1885 one company, that of Charles E. Goad, dominated the production of FIPs within Britain. Born in England in 1848 Goad was to become the doyen of British fire insurance mapping. After leaving the University of Oxford Goad moved to Canada in 1869 and became an engineer with various railway companies. He commenced his plan business in Quebec in 1875 and established a British branch of his company in 1885. This was to become the company's head office following Goad's death in 1910.<sup>2</sup>

Before Goad commenced mapping, only intermittent sets of FIPs had been produced in Britain from the later eighteenth century by various individuals, usually in association with a specific insurance company.<sup>3</sup> Such surveys concentrated chiefly on London; a systematic



Figure 1.

national coverage only occurred in the latter part of the nineteenth century. Of course it must be stressed that the emergence and development of fire insurance mapping procedures and the demand for such services must be set within the context of evolving insurance practices.<sup>4</sup>

As opposed to what may be termed the provision of a passive service for the insurance industry, in enabling companies to assess risks more precisely, Goad's procedures also contributed to the overall maintenance of safety standards and building regulations.<sup>5</sup> In this the Goad company worked closely with local fire brigades, and such fire services, in turn, were important users of the FIPs. These developed field survey procedures, in the systematic revisions of the FIPs, which necessitated on-site inspection and re-inspection of districts and individual buildings. Writing in 1883 in a somewhat antiquated style, Charles E. Goad summarized the need for and the brief background to the production of the insurance plans:

*Co-existent with the practice of fire insurance covering manufacturing risks especially, and hazardous and non-hazardous risks and occupations located at a distance from the office of the insurer as well, came the necessity for, if not the immediate use of the "survey", a description of the premises to be covered by the policy, with the accompanying "diagram" or ground plan, showing not only the internal hazard of the risk itself, but its relative position as to neighbouring structures, their classes, occupancy, etc., by which the insured premises might be exposed, not only for the underwriter against misrepresentations of the hazards — wilful or otherwise — as to the hazards attending such risks, but what might also be in possession of some acknowledged data upon which to approximate a fair premium rate for the risk assumed.<sup>6</sup>*

Further elaborations upon this theme appeared elsewhere.<sup>7</sup>

## Coverage and content

The Goad FIPs were first produced for urban centres in the British Isles in 1886 and within ten years the central parts of all major towns and cities were covered. By 1970, when this part of the Company's activities ceased, 53 centres had been surveyed. Since the late 1960s the Goad company, now of Old Hatfield, Hertfordshire, has produced the important and increasingly utilized Shopping Centre Plans which cover over 1,000 shopping centres throughout the British Isles.<sup>8</sup>

The areas of particular interest for these FIPs included the Central Business Districts of all the major urban areas, major commercial regions and industrial districts particularly related to warehousing and transport termini — railways, ports and canals.<sup>9</sup> The most detailed and extensive maps cover Glasgow, Liverpool, London and Manchester. Between 1885 and 1970 separate volumes covering 126 areas throughout the British Isles, particularly the central portions of the 53 centres referred to above, were produced by the Goad company from its London office. A set of FIPs of a specific area would be contained within one atlas-volume.

The large-scale plans depict, by means of colour and symbol, information on land use, internal and external building construction, building height, street widths and names, property numbers and property lines. When examining the plans it must be appreciated that they developed from the specific requirements of fire insurance underwriters to understand the physical characteristics of a building, its adjacent structures, fire-fighting facilities within a particular locality and the spatial concentrations of policy holders in order for any insurance company to assess its overall risks. An example of the 1879 Goad business circular promoting the use of fire insurance plans in Canada was also utilized within Britain (Figure 1). This circular provides an insight into

the benefits for insurance assessment purposes: the FIPs facilitated rapid and accurate access to the specific information required by the various fire insurance companies. Their large-scale depictions were particularly appealing.

Once the Goad FIPs were completed for a centre they would be placed in a large atlas. Individual sheets generally measured 25¼ inches (63.7 cms) by 21 inches (54 cms). Following the issue of this initial volume new surveys would be undertaken and the plans updated. A new edition would be published, on average, every six or seven years although for certain of the larger centres this was carried out biennially or even annually. The Goad plans were published in full colour and cover a large part of each central urban complex: not only the Central Business District but also a broad surrounding area with special consideration being given to warehousing districts, port facilities and factories, particularly those with higher fire risks such as cotton or woollen mills and jute factories.

Each volume commences with a key plan which identifies both the general area of FIP coverage within that volume and the specific area covered by each of the individual plans. Copies of the general outline plan for Manchester of c.1902 and January 1918 (Figure 2) indicate the areas covered by the various Manchester volumes overall. Likewise a copy of the Manchester Carriers' Warehouse (M.C.W) key plan of January 1891 (1st revision) provides details of FIP coverage for the wider Manchester region at that time (Figure 3).

Relating to the earlier general plan of Manchester in c.1902 (Figure 2-upper) the FIP coverage was then limited to four volumes for the areas indicated and the M.C.W. volume. By 1928 two further volumes, volumes V and VI, extensions of volumes IV and III respectively, had been issued (see Figure 2-lower) and the coverage of

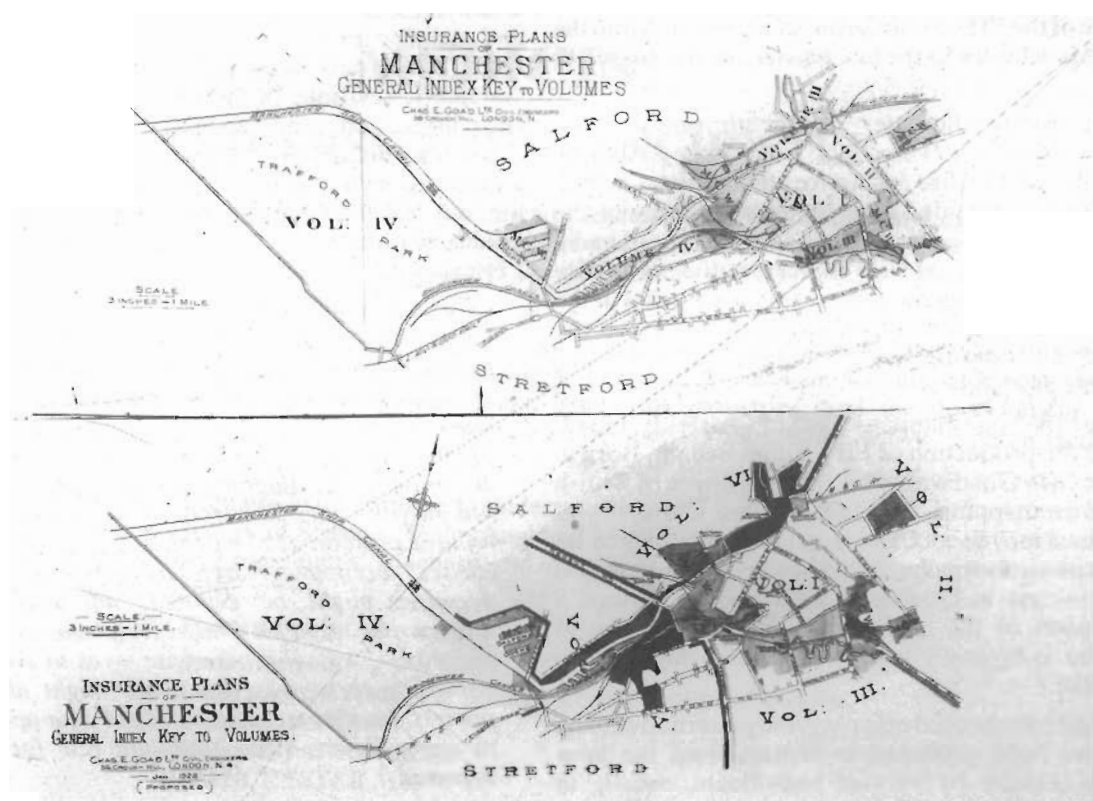


Figure 2.

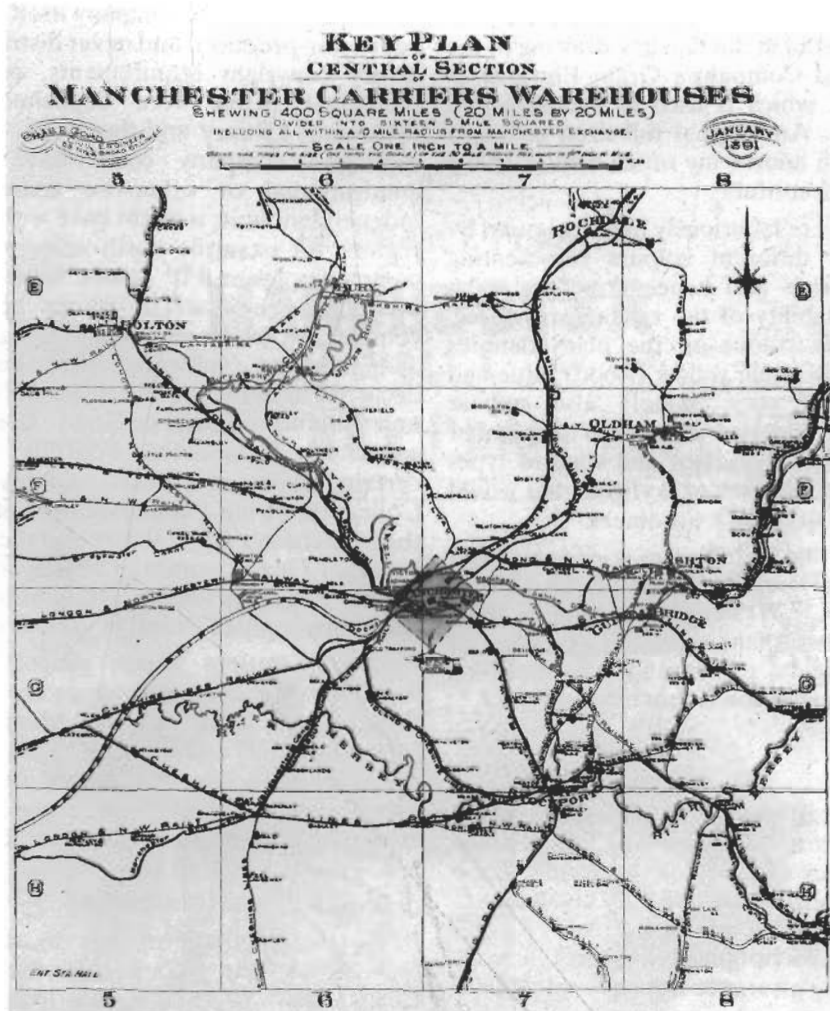


Figure 3.

the M.C.W. volume had also been extended in the mid-1920s. Indeed it should be noted that the 1920s witnessed major extensions in most of the areas surveyed by the company.

The key plan from Manchester volume I of January 1928 (11th revision) is also presented here (Figure 4). The heavier numbers refer to the areas covered by the specified plans within the volume. Also included within each volume is an explanation of the signs, abbreviations and shadings used within the FIPs (Figure 5). The key plan within each individual volume was usually scaled at 300 feet to 1 inch (1:3600) while the general but not universal scale for the individual FIPs was 40 feet to 1 inch (1:480).

Properties are clearly demarcated on the plans and identified by street numbers. The usage of buildings is identified by initials; for example "D" (dwelling), "S" (shop) and "OFFS" (offices). For industrial and commercial land uses the FIPs give the name of the company and its product line or lines. Where relating to storage the materials stored are identified.

Of considerable interest here are the so-called Carriers' volumes. In Britain these were produced for the regions about Manchester and Leeds although the London "lettered" volumes, A to K, are quite comparable.<sup>10</sup> These Carriers' volumes in essence present a regional and selective coverage of particular areas as opposed to an individual full centre-coverage of the town and city volumes. Specific areas would thus be covered within the general map area.

The M.C.W. volume of January 1891 (original edition), briefly referred to earlier, covers a region of 400 square miles divided into 16 x 5 mile squares. Rectangles scattered over the M.C.W. key plan (Figure 3), as at Middleton (216.J), Prestwich (221.M) and Trinity Street, Bolton (208-H) identify the specific FIP coverage within the Manchester Carriers' area. The detail 208 A-H following the Trinity Street, Bolton, entry indicates that there are eight plans covering that area. Figure 6 covering Pomona Docks from the M.C.W. volume of October 1935 (19th revision) reveals the finer details of the plans. For example, we note "Richard Haworth, Co Ltd" at "Ordsall Mills (Cotton)" and "G.W. Goodwin & Son — Ivy Soap Fac". Transport and storage operations are identified as for example in the various wharves and warehouses. In Dock No. 1 a structure is described as "Hay, Cotton and General" with a part given over to "A. Guinness & Co Ltd — Stout Store". Throughout, a detailed outline of specific warehouse usage is presented as are matters relating to construction, for example at Dock No. 1 where the storage structure is described as "Sides formed to slide. Angle Iron Ties 12' Apart. Supported on Wrot' I. Stanchions". (Fig. 6 is on p.2).

This, it is emphasized, would have assisted in the closer identification of "risks", especially from fire and its likelihood of spreading, and also to problems of access and rapid exit for both the facility users themselves and for those in the emergency services.

A further illustration presented here (Figure 7) is of an interesting isometric drawing from the M.C.W. volume of

November 1900 (2nd revision). This plan reveals the particular richness of detail in the fine line drawing of the Manchester Ship Canal Company's Grain Elevator at Trafford Wharf Road, which is used to elucidate and complement the plans. An original full-sized coloured copy of Figure 7, which adorns my office wall, is really quite startling, indeed beautiful!

The plans themselves were laboriously hand-coloured by the Goad staff, with different colours representing specific building materials and hence providing some guidance to the flammability of the various structures. The dominant magenta colour on the plans denotes bricks, stone or concrete while yellow (wood), blue and purple (skylights) and grey (metal) also appear prominently. Other details included relate to the number of floors, the differentiation of door and window types and such features as the location of skylights that would be of particular interest to Goad's customers.

It should be noted here that no reference is given to either the Pomona Dock FIP (Figure 6) nor the Trafford Wharf FIP (Figure 7) on the M.C.W. key plan of January 1891. This is because these two plans represent extension of coverage from that original presentation. Perusal of a later key plan after the extension is thus required.

### Revising the plans

The requirements of the fire insurance companies meant that the maps had to be continually updated. Likewise for the entire system of survey and revisions to operate to the continuing financial benefit of his company Goad had to limit the distribution of and access to the plans. To this end he operated a "subscription to borrow" service, whereby each subscribing insurance company would bear a proportion of the overall survey and production costs. The following statement pasted into a number of FIP volumes, reflects Goad's policy:

*As the price for these plans is largely increased by the limited number of subscribers, please see that plans in your possession are used solely for your company's business, not allowing Tracings or Copies to be made. Every company should bear its share in the expense of a common benefit.*

As outlined above, the Goad FIPs were never sold but only leased to subscribers on a long-term basis. This meant that a client would return an atlas for updating to Goad once informed that a new survey had been completed. If the alterations were minor, such as only a small number of land use changes or new ownerships in relatively few plots, previously prepared "correction slips" or tailored paper overlays were simply pasted onto the plan over the changed property or properties. However, if more fundamental changes had occurred such as the reconstruction of entire city areas a completely new plan would be issued. Thus an atlas could be issued in 1896 but, through continual updating, it would have its plans overlaid with pastings and individual plans replaced so that an atlas, originally produced in 1896, would contain land use maps as, for example, of 1968. For the urban and economic historian, local historians, industrial archaeologist, historical geographer and others interested in the development of structures, townscapes and the processes operative within this evolution, such an atlas is of less value than certain others which have not been updated in this manner.

There are several reasons for these FIP atlases surviving in an unmodified state. Firstly, certain atlases and plans

were retained by the company itself. Such items may have been over-produced and never distributed.<sup>11</sup> Secondly, to satisfy copyright requirements, copies of atlases and individual plans were deposited with the British (Museum) Library and thus never updated. Thirdly, an insurance company could have been taken over, amalgamated or otherwise ceased operating as an independent unit; it might have withdrawn from a certain region, for example north-western England. With less companies fewer FIP atlases were required. The result was that a number of atlases held by an insurance company would be returned to Goad. If, for example, an amalgamation between two insurance companies occurred in 1915, the FIP atlases of one company would normally be returned to Goad. These atlases, if stored, would not be updated. Fourthly, other libraries hold certain atlases and plans, notably the National Map Collection of the Public Archives of Canada in Ottawa, the Manchester City Library and the Guildhall Library in London. Finally, copies of atlases may still be found with certain fire departments, rating offices, planning offices, insurance companies and in various company archives.

Following patient search procedures, details of the published Manchester volumes are provided in Table I. Where gaps occur as for Manchester III between November 1893 and October 1911, the dates of revisions are as yet unknown. (It would be much appreciated if any details of further FIP "finds" could be passed back to the author to help complete the cartobibliography.)

### A plaudit for Manchester!

It is singularly appropriate to record here that the collection of the FIPs held in the Manchester Central Library at St. Peter's Square is particularly impressive although gaps still exist. Whereas the Goad company despatched plans to the British (Museum) Library, there the differently dated issues were catalogued and bound often in a most haphazard fashion, which suggests a lack of any real understanding of the plans. By contrast Manchester Central Library took the initiative and moved to obtain plans from Goad. Indeed it appears that Manchester Library maintained a watching brief upon the revision of the FIPs on the Manchester Region! This is to be discerned from a most interesting letter from Charles E. Goad to Roger Edwards, Accessions Librarian of the Manchester Public Libraries, in August 1974. Mr. Edwards had been wondering as to why no new Goad revision materials had appeared for Manchester since c.1970, and had written to Goad. In response Goad observed:

*Owing to mergers between Insurance Companies, the formation of large groups of Companies, and altered methods of doing business, we ceased revising our Fire Insurance Plans in 1970.*

*Because of the goodwill we had built up over the years, we were given a final contract of five years duration. This gave us time to start up a new venture, the preparation and revision of plans for Shopping Centres throughout the British Isles for Estate Agents, Multiple Retailers, Property Companies and others in the property world.*

The letter proceeded to give details of these new Shopping Centre Plans, and inviting orders. The offer was accepted and the Manchester Central Library thus came to possess a full collection of the Goad Shopping Centre Plans and subsequent revisions for the Manchester area.<sup>12</sup>



Figure 4.

Table 1 identifies the Goad material produced for the Manchester region with the key referring to locations of known extant materials, and c/4 indicates the FIPs held at the Manchester Central Library. The Goad catalogue provides details of what is available and it would be sensible to match the Manchester holdings with what is on offer from Goad. For example there is a gap in the Manchester holdings for Manchester II between 1942 and 1966, for Manchester IV between 1930 and 1965 and Manchester VI between 1930 and 1965. It is suggested that obtaining full FIP material for the Manchester region for about *one* year in the earlier 1940s should be identified as a specific objective-priority and funds sought for this purpose while the material is still available, prior to possible dispersals.

### Conclusion

There are many who simply enjoy browsing, often with a sense of nostalgia, over old maps and photographs of towns and cities and industrial areas, particularly of those areas that have been destroyed or redeveloped, yet which, nevertheless, may still remain set in one's mind's eye. Beyond this group, however, there are those who may have what may be termed a professional concern with FIPs as providing a unique documentary record of our urban past. The FIPs will serve historians, historical geographers and others especially when they are used in providing a base for cross-referencing with other census enumerators' books, directories, rating books and the data sources and records from which we may construct urban history.

**TABLE 1**  
**The Goad Fire Insurance Plans of the Manchester Region**

Volume	Original edition	Revisions												
		1	2	3	4	5	6	7	8	9	10	11	12	13
Manchester I	8.86 c/1+c/3		(?)9.01 c/4			9.13 c/4		9.17 c/2	10.21 c/1	9.24	12.26 c/4	1.28 p/1	12.28	12.30
Manchester II	2.88 c/1+c/3		9.01 c/4	11.21 c/4	3.28 c/1	1.31	1.33 c/2(+)	1.35	1.37	1.39 c/4	2.41	2.43 c/4	1.45	1.47
Manchester III	11.93 c/1+c/3						10.11 c/4		2.19 c/4	7.21 c/4		10.27 c/4	1.28 c/1	10.30 c/4
Manchester IV	12.02 c/1+c/3		12.11 c/4				12.17 c/4	12.21 c/4	12.24 c/4	11.27 c/4	11.30 c/4	12.33	12.36	12.39
Manchester V	Renumbered and extended from Vol. IV										11.30 c/4	11.33	11.36	11.39
Manchester VI	Renumbered and extended from Vol. III												7.28 c/1	10.30 c/4
Manchester Carriers' Warehouse	1.89 c/2	7.91 c/2	11.00 c/4	11.04 p/1								9.13 c/4		

Source of data: Rowley search.

**Key to Table 1**

- (?) — Exact revision number unknown
- 4.06 — April 1906
- c/ — complete volume
- p/ — part volume only
- /l — location as follows:
  - 1 — British Library, London
  - 2 — Goad Repository, Old Hatfield, Hertfordshire
  - 3 — National Map Collection, Ottawa, Canada
  - 4 — Manchester City Library, St. Peter's Square

- c/1(+1) — this indicates that more than one copy of this volume has been located at this source
- x — Major extension in areal coverage about this time.

**N.B.** The voluminous numbers of pastings-overlay sheets held by the B.L. are not included here. The Goad Catalogue of 1984 includes details of the large number of individual unbound sets held by Goad.

In addition to such uses, however, other groups such as the legal profession and environmentalists can utilize the FIPs for background information to support studies and disputes connected with, for example, rights of way, property lines and with questions of the environmental impact of certain new developments. Urban and industrial archaeologists can identify and demarcate the sites of demolished buildings for survey be metal detectors and architectural historians can study the location and construction of architecturally important buildings. Genealogists and local historians may likewise use the maps to identify more precisely streets and individual buildings in heavily-developed city centres.

It should by now be appreciated that no other set of plans show consistently such detailed land use information for the central parts of British urban centres and industrial and transportation districts. In the years after 1885 Goad's plans are comparable to the renowned Sanborn FIPs urban maps in North America whose value and importance has been succinctly described by Robert Wrigley:

*in the case of urban areas the most valuable source of land use information, other than field survey, is the fire insurance map . . . No other published map shows such detailed urban land use information.*<sup>13</sup>

It is intended that continuing work on FIPs will engender

a deeper, better informed interest in Britain's urban and industrial heritage and particularly in the changing form of the great Victorian cities. In addition the FIPs need to be considered in their own right as important and valuable cartographic procedures employed in the insurance industry at a crucially important time in its development.

Goad's FIPs provide a unique and concentrated form of information about a particularly dynamic period in our urban heritage. Indeed it is suggested that the Goad FIPs are the single most important cartographic source for the development of the central parts of the major British towns and cities and industrial districts in the period of quite remarkable change between 1885 and 1970. Historians of Manchester who are already in the habit of consulting town maps, especially the O.S. large-scale town plans, will find it a most worthwhile experience to consult the relevant FIPs so meticulously compiled by Charles E. Goad. It is hoped that this brief essay will serve to publicize and thus engender a mounting interest in the FIPs themselves among historians and other potential users in the Manchester region, and in our rich urban and industrial heritage which they so richly portray.

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