

15-1007

information Bulletin



15-1007

WESTERN ASSOCIATION OF MAP LIBRARIES

"... to encourage high standards in every phase of organization
and administration of map libraries ..."

Information Bulletin

VOL. 7, NO. 3

JUNE 1976

Western Association of Map Libraries

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TENTATIVE PROGRAM

FALL MEETING - WESTERN ASSOCIATION OF MAP LIBRARIES

Condon Hall, Department of Geography, University of Oregon, Eugene, Oregon - same floor as Map Library

both Thursday, September 23, 1976 & Friday, September 24, 1976
and, Saturday Morning, September 25, 1976
 [Friday at the Oregon State University, Corvallis]

Hosts Edward Thatcher and David Schacht will be putting the final details together for the Fall Meeting, and additional information will be mailed to all Principal Members and Institutional Members (within the Principal area). Others who would like to attend, or would like full information are invited to contact Edward Thatcher, Map Librarian, 165 Condon Hall, University of Oregon, Eugene, OR 97403 (phone ac503 - 686-3051). (Mailing planned for July.)

Thursday 1:30 pm WAML President opens meeting. Announcements, introductions, local directions, exhibits.

2:00 pm A symposium of UO cartographers-geographers to discuss the planning and execution of the Atlas of Oregon, expected for release on October 1, 1976. Some plates will be on view. Orders may be taken.

Break

3:30 pm Two-three more papers. One by the geographer-cartographer-white water boatman who has recently produced a map of a section of the Rogue River; another by a landscape architect on how he personally and professionally uses cartographic materials. Other presentations in planning stages.

Dinner Time and place depending upon local theater programs; a group dinner will be planned.

Friday Oregon State University at Corvallis

Leave Eugene by state/private autos by 8:30 am, travel 40 miles to Corvallis. Return by 5:30 or 6:00 p.m.

Morning programs in planning stages - presentation of papers.

Visit the Environmental Remote Sensing Applications Laboratory

Afternoon program being planned.

Group dinner in Eugene. Theater.

Saturday Morning Field trips: three-hour auto tour led by geographers; or, walking tour of part of Eugene's central business district led by geographer.

Business Meeting (either Sat. am, or another time to be announced)

THE WORLD MAP OF PIRI RE'IS

by

Karyl Anne Tonge
Central Map Collection
Stanford University Library

"In all the World there is no other map like this map...." - - Piri Re'is

Piri Ibn Haji Mehmed was, variously, a geographer, a cartographer, a pirate, a scholar and a poet. One might say he was a Turkish "Renaissance Man". He served, in their turn, both Selim I (The Grim) and Suleiman, known to us as "The Magnificent". He learned well the seas on which he sailed with his uncle, Kemal Re'is, a famous corsair and later an admiral of the Imperial Ottoman Fleet. Perhaps he is best known for his detailed and scholarly book of sea lore of the Aegean and Mediterranean, "Kitabi Bahriye", which, after many years of labor, he presented to Suleiman in 1526. As Commander of the Fleet of Egypt, his career came to an abrupt end in 1554 when Suleiman ordered his decapitation due to an unfortunate misunderstanding over some ships mislaid during a tricky escape from the Portuguese in the Persian Gulf. He left an interesting, and baffling, legacy.

In 1929, when the former Imperial Palace of Topkapi was being converted to a museum for Turkish antiquities, the director of the National Museum discovered a curious map which, upon examination, was found to be a portion of a world map compiled by Piri Re'is in Galipoli in the year 1513. The map was drawn on parchment of deer or gazelle hide and in its entirety had contained, according to Piri Re'is' own notes, all of "...the countries of Hind, Sind and China geometrically drawn and also from a map drawn by Colombo in the western region I have extracted it." The remaining fragment holds part of the Western Mediterranean region, Spain, the bulge of West Africa, the Atlantic, the West Indies and parts of Yucatan, Honduras and the Isthmus and the eastern half of South America. A strange coastline and an area showing mountains at the extreme south of the map bears the single legend: "This country is a waste. Everything is in ruin and it is said that large snakes are found here. For this reason the Portuguese infidels did not land on these shores and these are also said to be very hot." In addition to the descriptive marginal notes are the usual charming embellishments of birds, ships and beasts, both real and imaginary. One animal is described: "These monsters are seven spans long. Between their eyes is a distance of one span. But they are harmless souls." Also on the map are five wind roses, each with compass directions criss-crossing each other to form different grid patterns. These were thought to be aids to navigation and are of the type common to the so-called "Portolan" charts.

Extensive research on the map was carried out through the early 1930's by Turkish and German scholars who deciphered and translated Piri Re'is' notes, which, it happens were in Turkish

and not Arabic. It was revealed that the map had been constructed by "...the hand of this poor man ... from about twenty charts and mappae mundi. These are maps drawn in the days of Alexander, Lord of the two Horns." The study revealed also an exceptional accuracy of longitude, showing Africa and South America correctly relative to each other. This feature, we know, is not common to sixteenth century maps, for instruments or methods to measure longitude had not been developed and navigators could only find their way around the globe by trial and (mostly) error.

Considerable interest was displayed in Turkey, of course, by reports of the appearance of the Americas on the map. In view of the political climate in those years under the new leadership of Kemal Ataturk, one can appreciate the importance to national pride of the finding of a map drawn by a Turkish geographer so soon after the discovery of land to the West.

The popular press of the day emphasized the "lost Columbus map" angle especially. Though naturally many efforts were made by the Turkish Government and other officials to locate not only the other half of the map but any maps which might prove to have been source maps for Admiral Piri's work - the Columbus map in particular - but none were ever found.

Facsimiles of the map were produced by order of Kemal Ataturk and copies may be found in the Library of Congress and in many other libraries in the United States. Notes by Yousef Akcura, then President of the Society for Turkish Historical Research, together with full translations of all of Piri Re'is' marginal notes, accompanies Stanford's copy, presented to our library by a Turkish scholar who was at one time attached to the Hoover Institution.

After the flurry of interest in the 30's, the map fell into relative obscurity until the late 1950's when Professor Charles Hapgood of Keene State College, New Hampshire, launched his own investigations which were to be extended over a period of approximately five years. Hapgood was himself inspired by Capt. Arlington Mallery, author, archaeologist and engineer, who had proposed that the southernmost portion of the map appeared to be part of the coast of Artarctica, notably, Queen Maud Land and its bays and islands which are presently covered by the Antarctic ice cap. The idea that the coast of Antarctica, let alone any other coast, may have been explored and mapped before the coming of the ice, while it would seem highly unlikely to some experts, nevertheless was too intriguing for Hapgood to resist. He and a team of his own highly gifted students of the history of science began the arduous task of analyzing the map. Hapgood has told the story of these investigations in his fascinating book, "Maps of the Ancient Sea Kings", published in 1966.

Hapgood began his detective work with a general belief, let us say, in the extreme antiquity of the component maps used by Piri Re'is in his compilation. Nothing, he stresses, during the

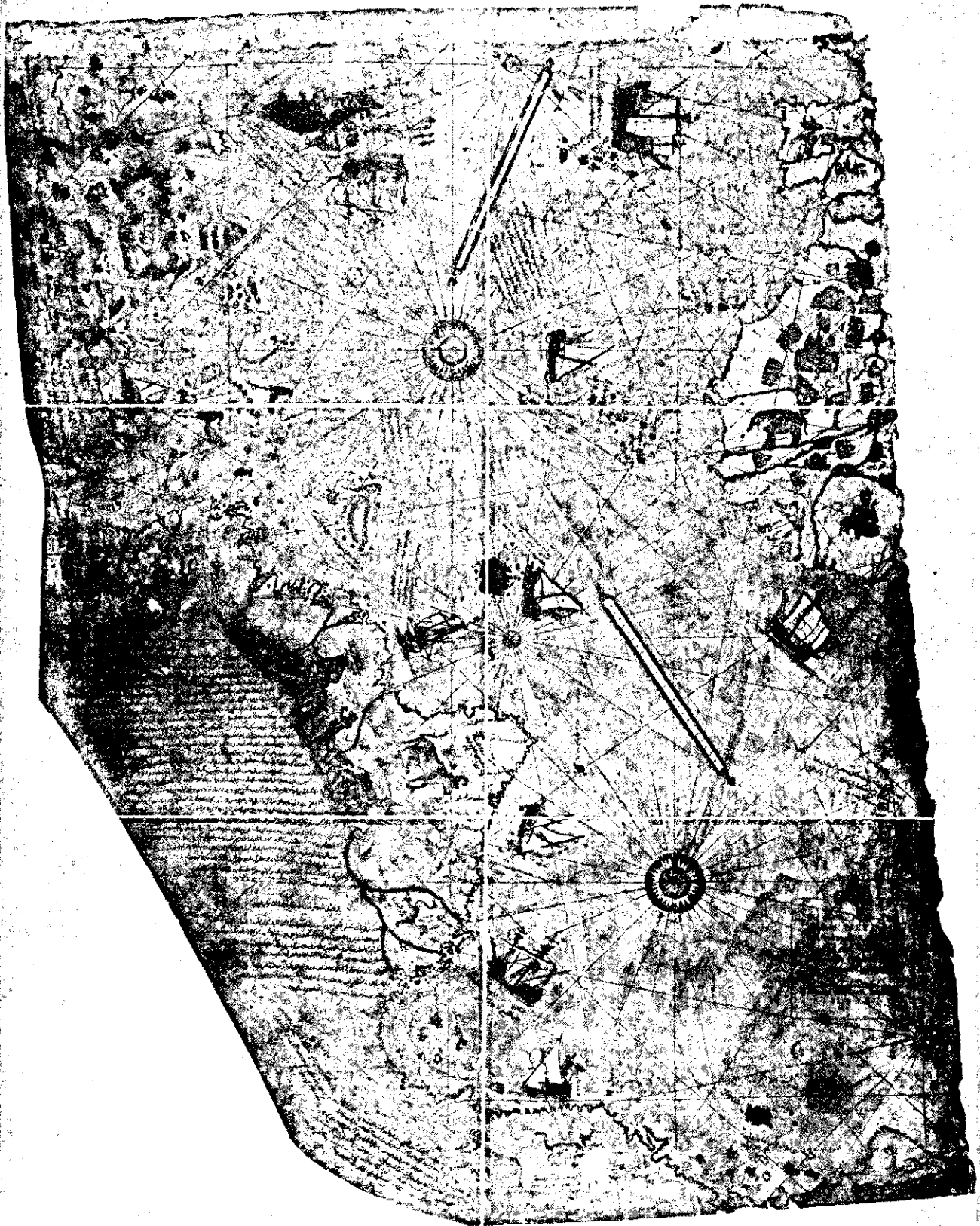


Photo of Stanford University, Central Map Collection's Facsimile of the 1513 Piri Re'is World Map

time of the study was to weaken that belief. In fact, it was to strengthen into firm conviction as questions were raised which could not be explained by referring only to the known cartographic conventions of Medieval or Renaissance maps. The problem of Antarctica, on the other hand, was the primary objective, but this could not be tackled without a complete study of the Piri Re'is map and of many other maps of the period, a few of which showed the same unusual characteristics, that is, containing bodies of land, mapped relatively accurately, which were unknown to the map makers, navigators and explorers of the day. As an example, the map of Oronteus Finaeus, drawn in 1531, includes Antarctica or "Terra Australis", as do a world map by Mercator, drawn in 1538 and the Schoner Globe of 1523-24.

The first of many problems which Hapgood and his students had to solve was to determine the grid on which Piri Re'is had projected his compilation. They found then what is believed to be the true purpose of the lines on the Portolan charts, and that is, mainly, to aid in the construction and copying of maps. Eventually, they were to discover that Piri Re'is had used as the center for his projection the intersection of Alexandria and the Tropic of Cancer. Then, through the use of trigonometry, they were able to construct or reconstruct the main grid and to calculate the measurement of the degrees. Later, they were faced with the discovery that the map had been compiled on four different grids with, of course, four different Norths! One of these grids has an error in scale, just to add to the confusion, and one is not, apparently, of the same vintage as the others, not having been based on a trigonometric projection.

Unstinting efforts were then made to determine in each case, the accuracy and/or error factors in latitude and longitude for each recognizable location. Even the unrecognizable points were given close scrutiny, such as "Antillia", above the equator of the original trigonometric projection. Three major omissions were found on the coast of South America: at the Peninsula of Paria they discovered a loss of 4.5° longitude going West; moving South, there is a loss of about 16° latitude and 20° longitude, due to the omission of coast line between Cape Frio and Bahia Blanca; finally, nine more degrees of latitude southward are lost with the disappearance of the Drake Passage. Adjustments then had to be made to account for the 25° of lost latitude.

At last, happily, they were successful in identifying: the Falkland Islands, the South Shetlands, South Georgia, the Palmer Peninsula, the Weddell Sea, Mt. Ropke, Queen Maud Land and the Regula Range, among other points. Concurring with their claim, then, that indeed this part of the map was the Princess Martha Coast of Queen Maud Land, were members of the Reconnaissance Technical Squadron of the U.S. Air Force at Westover, Mass. These persons stated clearly that the detail of the map in this region agreed remarkably with the seismic profile made in 1949 by the joint Antarctic Expedition of Britain, Sweden and Norway.

The mysteries are with us still. Just who were these people

who had, if we are to accept Charles Hapgood's final premise, such an advanced technology? It becomes clear through his dedicated research, that they understood plane and spherical trigonometry and that they had measured the Earth around better than, and long before Erytosthenes and that they probably circumnavigated the globe long before we even dare to dream. They have left us with only the tantalizing fragments -- their ghosts on maps.

Bibliography

Akcura, Jusuf. Piri Re'is Haritasi. Istanbul, Devlet Basimevi, 1935.

Hapgood, Charles H. Maps of the Ancient Sea Kings. Philadelphia, Chilton Books, 1966.

WEATHER ATLAS OF THE UNITED STATES. United States Environmental Data Service. Reprinted 1975, Gale Research Company, Detroit. 262 pages.

This reprint of the 1968 ESSA publication, originally titled the Climatic Atlas of the United States, is a collection of 271 maps and 15 tables of frequently required climatic statistics, both "normals" and extreme values. The data are distributed by element as follows (figures indicating the number of maps and tables, respectively, in each category): temperature (68 and 3); heating degree days (13 and 1); precipitation (45 and 1); snowfall (2 and 0); dewpoint (26 and 1); relative humidity (13 and 2); evaporation (5 and 0); sunshine (28 and 2); solar radiation (13 and 1); sky-cover (14 and 1); wind (30 and 2); barometric pressure (13 and 1). The maps, three-quarters of which are isarithmic, are presented on a standardized projection, one, two or four to a two-page spread. Data, generally presented in monthly and annual form, are mainly derived from the 1931-60 normal period, although other intervals are used in some cases and, regrettably, in others the period is not specified. Some short commentaries are included to aid the user of the statistics; these discuss heating degree days, maximum persisting 12-hour 1000-mb dewpoint temperature, the units used in radiation measurement and evaporation estimation. The latter is particularly welcome, since published data on this element are frequently misunderstood by those unfamiliar with their source.

In general, the avowed purpose of the volume, "to depict the climate of the United States in terms of the distribution and variation of constituent climatic elements", is well met. Reproduction quality is less than adequate in some maps, presumably a result of the reduction process. A personal complaint concerns the change from "climatic" to "weather" atlas in the title, a change which is not consistent with the distinction drawn between the two terms in the preface. The use of units which are not part of the *Système International* may confound non-American users, but hopefully will be corrected in any future editions of the atlas. Overall, it is expected that the volume should find considerable use among those, in commerce, agriculture, industry, research and education, requiring a convenient, authoritative and comprehensive source of climatic data for the United States.

A. John Arnfield
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New Titles, BRIEFLY NOTED

by

Edward P. Thatcher
Map Librarian
Univ. of Oregon, Eugene

1. U.S.S.R. Agriculture Atlas Washington, DC, Central Intelligence Agency, 1974. 60p. Superintendent of Documents No. PrEx 3.10/4: UN3/4 paper \$4.20

This is similar in planning, appearance and quality of cartography to the CIA's other major atlas, Peoples Republic of China Atlas, 1971, but with more well-chosen photos, more text, maps of smaller scale and less total cost. A very superior product and long on eye-appeal. Within price range that it may well be recommended for student purchase.

2. Peoples Republic of China. Administrative Atlas. Washington, DC, Central Intelligence Agency, 1975. 68p. [price not stated] paper

This will be available through the G.P.O. Similar high quality to those earlier CIA editions. This contains a very useful Romanization conversion table and exhaustive indexes.

3. Singh, Jasbir. An Agricultural Atlas of India: a geographical analysis.

Kurukshetra, India, Vishal Publications, 1974. xxvi, 356p., 110 maps.
\$22.50

Not really an atlas, it is more a monograph for subcontinent agricultural geography, abundantly illustrated by black & white maps of scale too small for the best transfer of information. It may be a valuable addition to a special regional collection of cartographic materials, or useful in a general map library as a study complementary to India's national atlases.

4. Atlas of Iran, White Revolution Proceeds and Progresses. Tehran, Sahab Geographic & Drafting Institute, 1974. 198p. 34 x 24cm. \$64.50

This national atlas employs both English and Persian languages. Some critical facts, such as map scales are in Persian only. An oil-rich country should afford more advanced cartographic techniques than were apparently employed for this atlas. Poor registration of a great range of very intense colors and many confusing symbols distract the eye. Some unneeded and expensive flourishes detract from the startling first impression it might have made.

5. Beaujeu-Gernier, Jacqueline et Jean Bastié. Paris et la Region Parisienne. Atlas pour tous. Paris, Berger-Levrault, 1972. 20 pl. 29 x 39cm. 40F.(ca \$9.50)

This is a reduction of their 1967 folio edition with some recent information added. It has the same well-chosen colors, symbols and pleasing scales. Pages of thematic maps are opposed by a page of brief text for each. Covers of heavy paper in leather-imitation and plastic rings for spine lend an impression of sturdy format. Excellent overall planning and simplicity are its evident merits. What could be better?

6. Shephard, John, John Westaway, and Trevor Lee. A Social Atlas of London. Oxford, Clarendon Press, 1974. 128p. 22 x 30cm. \$16.00

Social development - since Tudor time -, housing, population structure, socio-economic groups, shopping and transport, education-welfare, and local elections are subjects treated with a pleasing variety of scales, in three colors. A brief text for each subject complements the maps on pages facing. Boundary employed is that of Greater London Council with usual scale of 1:250,000. Very few maps include London boroughs only. An enormously appealing atlas promising great utility wherever urban geography is taught.

7. Nuhn, H., and others. Zentralamerika, Karten zur Bevölkerungs- und Wirtschaftsstruktur. Hamburg, University of Hamburg, 1975. xv, 180p. 10 map pl. (loose within back cover). 60DM. (ca. \$26.)

This is marketed by GeoCenter, Stuttgart. Ten subject maps, all at scale of 1:2million, reflect conditions of the period 1969-73. Maps contain critical essentials in both German and Spanish. It has in its favor some very pleasing cartographic points on ten distinct and separate maps. Highly recommended for research collections.

8. North Carolina Atlas, portrait of a changing southern state. Edited by James W. Clay, et al. Chapel Hill, University of North Carolina Press, 1975. xi, 331p. 22.5 x 28.5cm. \$17.95

This is such a magnificent publication that it can be compared only to the atlases for the several provinces of Canada. This is very notable for depth of information, evident careful planning, and most intoxicating for eye-appeal. Worth the expense for the striking strategically arranged black and white photographs. Surely this is one of the most detailed and attractive of the many state atlases which have appeared in the 1970's.

Atlas Reviews

by

Sandra Lamprecht
Geography and Map Librarian
California State University
Long Beach

1. Bertin, Jacques. Atlas des Cultures Vivrières: Atlas of Food Crops. by Jacques Bertin, et al. Paris, Ecole Pratique des Hautes Etudes-Sorbonne, [1971]. 18 plates.

A very interesting loose-leaf atlas which shows world-wide distribution of various foodstuffs (i.e., wheat, rye, olives). Each map also shows direction of spread, and date of domestication. Includes text and an excellent bibliography.

2. Economic Atlas of Great Britain. [Aylesbury, Eng.], Ginn, [1974]. 186p.

A thematic atlas with text of Great Britain excluding Northern Ireland. The maps are easy to read and information such as textile industry, foreign trade, banking, etc. are given full-page coverage.

3. Kokusai Kyoiku Joho Senta. Atlas of Japan: Physical, Economic and Social.
[2d ed.] Tokyo, International Society for Educational Information,
1974. 64p.

A new edition of this well-done national atlas. Most of the maps are either at the scale of 1:6,000,000 or 1:4,000,000 and the thematic maps are accompanied by descriptive text in three languages. Also included is a folded general map of Japan at the scale of 1:2,000,000.

4. Wood, Roland. The New Florida Atlas; Patterns of the Sunshine State
[by] Roland Wood [and] Edward A. Fernald. [n.p., Trand Publications,
1974]. 119p.

A variety of cultural, physical and economic geography variables are mapped (i.e., income, population, tourism and recreation). This work also includes text and a list of sources.

Cartographic Literature: A Quiz

by

Harry Steward
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Department of Geodetic Science
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Columbus

Bibliographies in cartographic literature are rather a mixed bunch of items. Some are specialized (with many areas neglected), some are too narrow, some overly comprehensive, some sadly out of date, some relatively inaccessible, and so on. Most teachers, therefore, in addition to using the existing tools, compile their own in-house literature lists. Anybody doing this, and starting at the broad end of this spectrum - that is, with texts dealing with general aspects of the whole subject or overviews of large chunks of it - cannot but be struck by the similarity of many of the titles.

Indeed, recalling the exact wording of a title or identifying a given one is often a tricky memory problem. Of course, such recall ability is not usually very important in the long run, but as a lighthearted test readers of the Information Bulletin might care to see how many of the following they can identify. The list in question is a slight expansion of one initially compiled as a non-serious Christmas quiz for colleagues and grew out of a personal grappling with bibliography problems.

Many, of course, will be recognized immediately, but the person able to get 50 correct is a rare bird indeed. However, no prizes are offered and answers are available for the less than perfect! It should be noted that some titles are so general (e.g., 31 and 45) that more than one publication is possible.

1. Maps
2. Maps (Their History, Characteristics and Use)
3. Maps (Topographical and Statistical)
4. Maps (A Historical Survey of their Study and Collection)
5. Mapping
6. Elements of Mapping
7. Maps and Mapping
8. Of Maps and Mapping
9. On Maps and Mapping
10. The World of Maps and Mapping
11. Map Making
12. Map Making (The Art that Became a Science)
13. The Making of Maps
14. Lets Look at Maps and Map Making
15. Maps and Map Makers
16. Maps and Their Makers
17. Maps: How they are made: How to read them
18. The Mapmakers Art (Essays on the history of maps)
19. Maps and Man
20. Of Maps and Men
21. Men and Meridians
22. Measuring a Meridian
23. How to Map the Earth
24. Mapping the World
25. The Philosophy of Maps
26. A Key to Maps
27. Maps and how to Understand Them
28. Understanding Maps (charting the Land, Sea and Sky)
29. Mental Maps
30. My Head is a Map
31. Map Interpretation
32. Map and Landscape
33. Foreign Maps and Landscapes
34. The Look of Maps
35. The Story of Maps
36. Maps and Diagrams
37. Maps and Survey
38. Maps and Air Photographs
39. Maps and Prints
40. Animals and Maps
41. Maps, Mirrors and Mechanics
42. Maps for Books and Theses
43. Make me a Map of the Valley
44. No Longer on the Map
45. Antique Maps
46. Discovering Antique Maps
47. The World on Paper
48. The Round Earth on Flat Paper
49. A Paper Landscape
50. World Maps and Globes

HISTORICAL ATLAS AND MAP COLLECTION OF OREGON,
 KERR LIBRARY, OREGON STATE UNIVERSITY

by

David W. Schacht
 Map Librarian
 Oregon State University
 Corvallis

INTRODUCTION

The map room in Kerr Library at Oregon State University contains the largest collection of historical maps and atlases of Oregon in Benton County. The Benton County Historical Society has no building of its own in Corvallis, and its collection consists of scattered holdings in the residences of individual members.

For this paper the year 1920 has been selected as the arbitrary cut-off date for the "historical" collection of maps and atlases. This permits inclusion of some significant items which would otherwise have been omitted had, say, the turn of the century been adopted.

The map collection includes photostatic and other copies as well as original maps; the former are so designated. Not included are reproductions of recent vintage from publishers who have mass produced them with an "antiqued" appearance for widespread sale to the general public. The citations have been annotated with notes of interest, repeated verbatim, which appear on many of the maps.

RECENT ATLASES OF HISTORICAL INTEREST

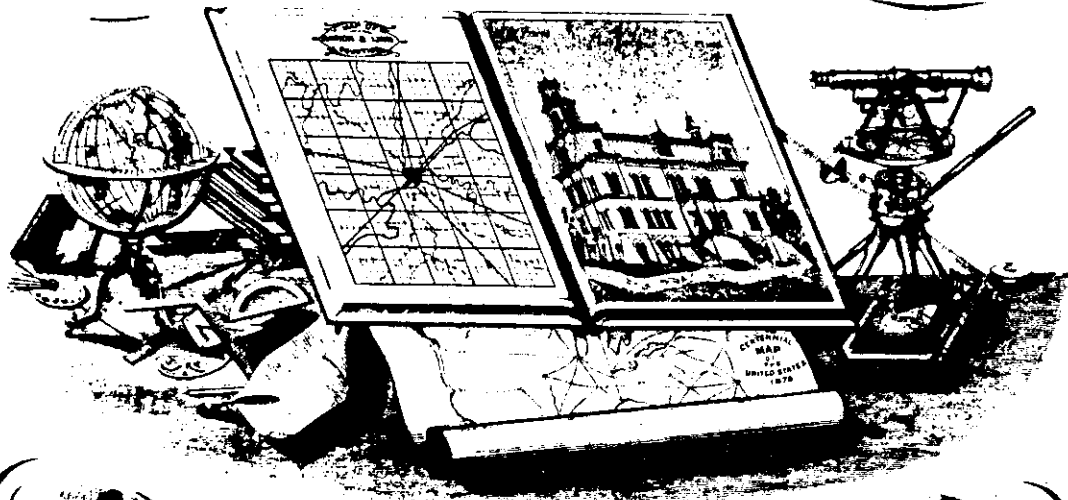
Attention should be called to two recently published atlases which are collections of historical maps of Oregon of particular interest. Historical early Oregon: early forts, old mines, old town sites⁶ consists essentially of reproductions of early maps of Oregon dating from 1804 to 1821. A modern highway map is also included, as are several pages of early photographs and two pages of comments on the included maps.

An historical atlas of early Oregon³, on the other hand, contains mainly original maps compiled by the authors following extensive historical research, during which numerous problems were encountered. Early exploration of the Oregon coast was conducted with the use of poor navigating instruments, and inadequate records were kept. As a result, the authors were forced to devote many hours to checking information in recent scholarly works against courses plotted from the original logs. The atlas is divided into four sections: (1) Indians, (2) Early exploration, (3) Maritime fur trade and exploration, and (4) Overland exploration, fur trade and settlement. The volume is a significant contribution to the cartographic history of Oregon.

EARLY HISTORICAL ATLASES

Historical atlas map of Marion and Linn Counties, Oregon. Compiled, drawn, and published from personal examinations and actual surveys by Edgar Williams and Co., San Francisco, California, 1878. [see illustration, next page]

HISTORICAL ATLAS MAP
WADSWORTH & WADSWORTH
COUNTIES



OREGON

COMPILED, DRAWN AND PUBLISHED FROM PERSONAL EXAMINATIONS AND ACTUAL SURVEYS

WADSWORTH & WADSWORTH

SAN FRANCISCO,

1878

CALIFORNIA.

This atlas is described in the preface as "the first work of its kind attempted in the State of Oregon" (2, p.3). A new feature introduced was the designation of original donation claims with the names of the original owners and the acreage. This information was included because of its potential value to future settlers in the counties. The following expression of appreciation by the publisher for assistance rendered by the local residents has a sincere ring: "We are pleased to acknowledge that the good will, public spirit and enterprise of the citizens of Marion and Linn Counties were such, that we were enabled to successfully carry through our undertaking, for it is only among an obliging, intelligent and prosperous community, that we can ever expect to obtain that support, without which no similar work can be published." (2, p. 3).

The atlas is replete with highly detailed drawings of city dwellings, farm homes and agricultural scenes, as well as businesses and public buildings. Orchard trees are lined up with military precision. Soliciting paid "advertisements" of this nature among the residents of a given geographic area was a practice among early atlas publishers to help underwrite the financial success of the venture. Such drawings constitute a valuable historical record of structures which may have long since vanished.

Fetros (4, p. 6), in discussing the atlas publishing of Alfred Andreas, the founder of Andreas, Lyter and Company of Dubuque, Iowa, in the latter half of the nineteenth century, makes the following comments about his practices:

"... He not only hired surveyors to draw the maps, but he sent out a team of canvassers soliciting subscriptions as well as contracts for biographical sketches and portraits. For an additional consideration a farmer could have his name inscribed on the county map with the extent of his acreage.... The number of subscribers to these early atlases was not insignificant, especially since subscribers could pay to have pictures and biographical material included on themselves."

Seventeen pages of history of Marion and Linn Counties are also included. The last few pages of this history are numbered as follows: 26 $\frac{1}{4}$, 26 $\frac{1}{2}$, 26 $\frac{3}{4}$. The latter is followed by biographical sketches on page 26A and this, in turn, by page 27. A similar sequence of paging of biographical sketches is found on pages 58, 58 $\frac{1}{4}$, 58 $\frac{1}{2}$, 58 $\frac{3}{4}$, 58A and 59, following which standard paging is resumed. Maps and pictorial drawings are consigned to pages designated with whole numbers. Text material is scattered indiscriminately on pages identified with either whole numbers or fractions, most of which are at the top, right-hand corner of the pages. Other pages are numbered at the bottom center, with or without parentheses.

The patrons' business directories of Marion and Linn Counties conclude the atlas. In addition to the individual's business and city or village of residence, or township and range if rural, the information also includes his native state or country, year(s) of arrival in both Oregon and Linn or Marion County, his post office address, and number of acres.

Hand tinting in pastel shades of green, yellow, tan and pink is used throughout the atlas to differentiate political subdivisions ranging from counties down to city and village additions.

Standard atlas of Umatilla County, Oregon. Compiled and published by George A. Ogle & Co., Publishers and Engravers. Chicago, 1914. [see ill., next page]⁵

STANDARD ATLAS
 OF

UMATILLA COUNTY
OREGON

**INCLUDING
 A PLAT BOOK**

OF THE

VILLAGES, CITIES AND TOWNSHIPS OF THE COUNTY.

MAP OF THE STATE, UNITED STATES AND WORLD.

Patrons Directory, Reference Business Directory and Departments
 devoted to General Information.

ANALYSIS OF THE SYSTEM OF U.S. LAND SURVEYS, DIGEST OF THE
 SYSTEM OF CIVIL GOVERNMENT, ETC. ETC.

Compiled and Published

BY

GEO. A. DOLE & CO.

PUBLISHERS & ENGRAVERS.

CHICAGO.

1914

Copyright 1914 by Geo. A. Dole & Co.

This atlas lacks a foreword or preface of any kind, with the table of contents immediately following the title page. Like the Historical atlas map of Marion and Linn Counties, this one employs pastel tints to differentiate political units. Unlike the atlas of Marion and Linn Counties, its pages are all designated with whole Arabic numbers consistently placed in the upper right-hand corner. The detailed drawings, so abundant in the first atlas, are lacking. Two pages of small photographs of local citizens, public buildings, and private dwellings and businesses constitute the illustrations, excepting three photographs on two full pages of the advertizing section.

Seemingly out of place in a county atlas is a nine-page supplement entitled "Ancient, medieval and modern history chronologically arranged". However, this, together with two other supplements, "Digest of the system of civil government", and "General information regarding banking and business methods", would substitute in part for the lack of an encyclopedia in the home.

The "Patrons' reference directory" includes for rural addressees not only the township and range, as in the atlas of Marion and Linn Counties, but the section number as well. However, it lacks supplementary information such as country or state of origin, arrival time in Oregon, and farm acreage.

Sanborn Maps. New York, Sanborn Map Company, 1884-1951.⁷

The map library has a collection of 5,109 sheets of Oregon city maps, some of which are bound, but the majority in loose-leaf folders.

[Benton County atlas.] 1913.¹

This atlas consists of 23 sheets at a scale of 1 inch equals 10 chains, and one sheet at a scale of 1 inch equals 100 feet. Each sheet covers one township, or a portion thereof, showing property ownership lines only.

Township survey plats, Willamette Valley, Oregon. U. S. General Land Office. Oregon City [or] Portland, 1852-1856.⁸

This collection of photostatic copies of 116 sheets is at the scale of 1 inch equals 40 chains [1 inch equals $\frac{1}{2}$ mile]. Unfortunately, the library lacks a copy of the accompanying surveyors' field notes. It is a popular source of local historical information among patrons conducting genealogical searches.

In contrast to the Benton County Atlas of 1913, which portrays only property ownership boundaries, this atlas includes a wealth of detail, such as hachured contours, lakes and drainage, notes on soils present, kinds of timber, and locations of schools and farm buildings.

HISTORICAL MAPS

The historical maps below are listed chronologically. This arrangement was chosen, in preference to listing them alphabetically by author or compiler, to permit verbatim presentation of the often descriptive introductory material following the title. The symbol (C) designates a copy of the original.

1838. Map of Oregon Territory, by Samuel Parker. Scale 50 mi. to one half of an inch. (C)

1838. Map of the U.S. Territory of Oregon west of the Rocky Mountains. Compiled in the Bureau of Topographical Engineers from the latest authorities under the direction of Col. J. J. Abert, by Wash: Hood. Scale 1" equals approx. 14 mi. (C)
- "Exhibiting the various trading depots or forts occupied by the British Hudson Bay Company connected with the Western and North-western Fur Trade."
1846. Mitchell's new map of Texas, Oregon, and California, with the regions adjoining. Compiled from the most recent authorities. Philadelphia, S. Augustus Mitchell. Scale 1" equals approx. 110 statute mi. or 115 geographic mi.
- This map is folded into the back of a small, pocket-size text entitled "Accompaniment to Mitchell's new map of Texas, Oregon, and California with regions adjoining", which states that the original map and history from which this was reproduced was used as a guide by its owner, William Gougar, while crossing western United States from St. Louis via the Old Oregon Trail to California.
1851. A diagram of a portion of Oregon Territory. Surveyor General's Office, Oregon City, October 20, 1851. John B. Preston, Surveyor General. Scale 1" equals approx. 16 mi. (C)
1851. Sketch of the Willamette Valley. By George Gibbs and Edmd. A. Starting. Scale 4 mi. to the inch. (C)
- "Showing purchases and reservations made by the Board of Commissioners, appointed to treat with the Indians of Oregon."
- "The course of the Columbia River and of the Willamette, as high up as Oregon City, is enlarged from Captain Wilkes' map. That of the Willamette from the Falls to Salem is from a survey by Leonard White of Salem. The courses of the other streams are laid down from verbal information obtained from residents. They, accordingly, are to be considered only as an approximation but are, for the most part, probably as correct as can be without actual survey."
1852. Map of the surveyed portions of Oregon Territory. Surveyor General's Office, Oregon City, October 21, 1852. Scale 1" equals 3 mi. (C)
1852. A diagram of a portion of Oregon Territory. Surveyor General's Office, Oregon City, October 21, 1852. Scale 10 mi. to an inch. (C)
1859. Map of the State of Oregon and Washington Territory. Compiled in the Bureau of Topographic Engineering chiefly for military purposes by order of Hon. John B. Floyd, Sec. of War. Scale 1/1,500,000. (C)
1860. Colton's map of Oregon, Washington, Idaho, British Columbia and Montana. Published by J. H. Colton, 172 William St., New York. Scale 1" equals 48 mi. (C)
1860. A diagram of Oregon, by W. W. Chapman, Surveyor General of Oregon. Surveyor General's Office, Eugene City, September 30th, 1860. Scale 1" equals 18 mi. (C)
1863. A diagram of public surveys in Oregon, by P. J. Pengra, Surveyor General of Oregon. Surveyor General's Office, Eugene City, August 24th, 1863. Scale 1" equals 18 mi. (C)

1868. Topography of Cape Foulweather and entrance to Yaquina Bay, Oregon. Surveyed by A. W. Chase. U.S. Coast Survey, Benjamin Pierce, Supt. Scale 1/10,000. (C)
1874. Habersham's sectional and county map of Oregon. Compiled from the most recent U.S. Government maps and surveys. Published by J. K. Gill and Co., Booksellers and Stationers, Portland, Ogn. Scale 1" equals 12 mi. (C)
1876. State of Oregon. General Land Office. J. A. Williamson, Commissioner. Compiled from the official records of the General Land Office and other sources by C. Roeser, Principal draughtsman, G.L.O. Scale 1" equals 15 mi. (C)
1878. J. K. Gill and Co.'s Map of Oregon Ter. Portland, Ogn. Compiled by Robert A. Habersham, Civil engineer. Scale 1" equals approx. 11 mi. (C)
- "Showing all surveys made previous to January 1st, 1878."
1882. J. K. Gill and Co.'s Map of Oregon. Portland, Ogn. Compiled by Robert A. Habersham, Civil engineer. Scale 1" equals 15 mi. (C)
- "Showing all surveys made previous to January 1st, 1882."
1882. Map of Polk County, Oregon. Published by H. W. and T. H. Ogilbe, Portland. Scale 3/4" equals 1 mi. (C)
- Land ownership map.
1887. Topographical reconnaissance of the coast of Oregon from Cascade Head to Tillamook Bay. Executed in July and August 1887, by Cleveland Rockwell, Assistant. Scale 1/40,000. (C)
1888. Map showing land grant of the Northern Pacific Railroad Co. in western Washington and northern Oregon. Corrected up to August 20, 1888. Scale 1" equals 6 mi. (C)

"Terms of Sale"

"The price of agricultural lands ranges chiefly from \$2.60 to \$6.00 per acre. If purchased on FIVE YEARS'TIME, one fifth cash. At end of first year the interest only on the unpaid amount. One-fifth of the principal and interest due at end of each of next four years. Interest at 7 per cent per annum.

"ON TEN YEAR'S TIME. Actual Settlers can purchase not to exceed 320 acres of Agricultural Land on TEN YEARS' TIME at 7 per cent interest, one tenth cash at time of purchase and balance in nine equal annual payments, beginning at the end of the second year. At the end of the first year only the interest is required to be paid. Purchasers on the Ten Years' Credit Plan are required to settle on the land purchased and to cultivate and improve the same.

"TIMBER LANDS. Cash, or by special agreement."

- n. d. Map no. 1 of western Oregon showing lands of the Oregon and California Railroad Company. Scale 4 mi. equals 1 in.

"Terms and Conditions"

"These lands are sold on ten years credit or for cash. If sold on credit, the purchaser pays down one tenth of the amount; one year after the date of sale, he pays 7 per cent interest on the remaining nine-tenths of the principal; at the end of the second year he pays one tenth of the principal and interest on the remainder, and the same each successive year, until all has been paid at the end of ten years. If the land is sold for cash a discount of 5 per cent on the purchase price will be allowed."

- n. d. Route of the Oregon Railroad and Navigation Co.'s Excursion Steamer T. J. Potter between Portland and North (Long) Beach. Scale 1" equals approx. 10 mi. (C)
- n. d. Map of the Oregon Railroad and Navigation Co. along the Columbia River. Portland to Celilo Falls. No publisher. Scale 1" equals 10 mi. (C)
1890. Map of the city of Albany, Linn County, Oregon. Published and copyrighted by G. W. Watts, General job printer, Albany, Oregon. Scale 10 CHS equals 1 in.
- "Albany, the great railroad center of the Northwest."
1890. Portland, Oregon. By Clohessy and Strengales. 3 dimensional pictorial. (From the archives of the Oregon Historical Society 1967) (C)
1893. Arnold's official map of Umatilla Co., Oregon. Compiled by John C. Arnold, county supervisor. Scale 80 chains to 1/2 in.
1895. Map of Lincoln County, Oregon. No publisher. Scale 1/2" equals 1 mi. Delineates Siletz Indian Reservation.
1897. Map of the State of Oregon. Compiled from the official records of the General Land Office and other sources under the direction of Harry King, C. E., Chief of Drafting Division, G. L. O. Scale 1" equals 12 mi.
1903. Map of Benton County, Oregon. J. P. Huffman, Architect. Corvallis, Oregon. Scale 1" equals 1 mi. (C)
- "Showing county roads, voting precincts, railroads, towns, post offices, churches, schoolhouses, mills, and many other public objects of interest to the public."
1904. Map of the State of Oregon. Bushong and Co. Map Engravers, Portland. Scale 1" equals approx. 12 mi.
- "Entered according to Act of Congress A.D. 1904 by J. Thornton Ross in the Office of the Librarian of Congress at Washington, D.C."
- "For supplies of these maps apply to the Hunter Land Company... who own and control the entire output of this, the only reliable sectional map of Oregon."

1911. Map of the State of Oregon. Published by the J. K. Gill Company, Portland, Oregon. Scale 1" equals approx. 9 mi.

Note stapled to back: "Gill's new sectional map of Oregon. Latest and most complete information from U.S. and all official sources. Surveyed lands, railroads, cities, towns, irrigation projects, etc. The only reliable road map of the state."

1913. Grazing classification and base map. MINAM Willamette meridian. Compiled by H. S. Meekham. 3 sheets. Scale 1" equals 1 mi.

1915. State of Oregon. Map prepared from official records under the direction of Senator I. N. Day, Chairman, Senator J. C. Smith, Representative J. D. Abbott, Representative V. A. Forbes, majority members of Columbia River Power Project Committee by Wm. E. Morris, Committee Engineer. 2 sheets. Scale 1" equals approx. 13 mi.

"To accompany the report of the Columbia River Power Project Committee to the Oregon State Legislature, 1915."

1915. Rand-McNally new commercial atlas map of Oregon. Scale 1" equals 16 mi.

SELECTED REFERENCES

1. [Benton County atlas] 1913. 24 sheets.
2. Edgar Williams and Co. Historical atlas map of Marion and Linn Counties, Oregon. San Francisco, 1878. 104 (i.e., 112) p.
3. Farmer, Judith A., et al. An historical atlas of early Oregon. Portland, Historical Cartographic Publications, 1973. 53 p.
4. Fetros, John G. State and local atlases: some observations on collection building. Western Association of Map Libraries, Information Bulletin, 3(2):2-17. 1972.
5. George A. Ogle and Co. Standard atlas of Umatilla County, Oregon. Chicago, 1914. 114 numb. p., 26 unnumb. p.
6. Preston, R. N. Historical early Oregon: early forts, old mines, old town sites. Corvallis, Western Guide Publishers, 1972. n.p.
7. Sanborn Map Company. [Oregon city maps] New York, 1884-1951. 5,109 sheets.
8. U. S. General Land Office. Township survey plats, Willamette Valley, Oregon. Oregon City [or] Portland, 1852-1856. 116 sheets.

PRINTED MAPS AT THE HUNTINGTON LIBRARY

Carey S. Bliss

Printed maps at the Huntington Library are under the care of the Curator of Rare Books. They are serviced to scholars in the Rare Book and Manuscript Reading Room in the same way that books and manuscripts are handled. Printed maps are catalogued generally under Library of Congress rules with the main entry being the cartographer. An added entry records the map by location and date. The call number for an atlas or map in the rare book collection is also the accession number.

The housing of maps and atlases in the rare book vaults has been developed over a period of years by the department staff. Three factors were considered in the matter: first, protection for the item, second, ease of handling and third, speed of servicing the particular item to the scholar or researcher. This has sometimes resulted in a trial and error method which is still far from perfect. Of course, to begin with, we had one great factor going for us, a fire-proof, earthquake proof vault, air conditioned and humidified with carbon filters on the air intakes which remove most foreign impurities. Single maps are generally shelved in broadside folders for which a standard size of 32 1/2 inches long and 22 1/2 inches wide was established. They are shelved on deep metal shelving about fifty to a shelf and filed by call number for ease in finding. Folding maps in paper covers are filed in envelopes of three sizes and filed by number, as are single maps bound in hard covers. Very large rolled maps are usually placed in cardboard cylinders and filed in racks.

Bound atlases are filed in two categories. Atlases printed before 1800 are filed by size and date. Atlases after 1800 are filed by size and entry. Two large collections of maps relating to America from the exploration period to the mid-nineteenth century are still uncatalogued though they were purchased in 1924 and 1927. Both lots were purchased, *en bloc*, from the Museum Book Store in London. The first lot was described in the Museum Book Store Catalogue 93, 848 items, *Maps of America from 1550-1850*; second lot Catalogue 105, *Maps of America from the 16th to the 19th centuries*, 1008 items. The maps are available in a separate card file and are called for by catalogue number and item number as they were listed for sale. Since the Library bought the entire contents of both catalogues, the printed catalogues themselves were sent along with the maps when they were delivered to us in 1924 and 1927.

While on the subject of special card files of maps, one other map card file should be mentioned. It is a finding list of maps in English books printed between 1475 and 1640, filed by locale. It was compiled by a Huntington staff member and includes only those maps found in English books on the Library's shelves.

Since the Huntington Library was founded as a research center for

Anglo-Saxon culture, i.e. English and American history and literature, you will find naturally, that the map collections tend to reflect this theme. That is not to say that the great continental atlases are not present in the Library because that is not so, but they are not present in as many editions and variants as at a library slanted more towards continental history and literature.

In brief, some statistics about the Library's holdings of maps and atlases would reveal the following: approximately 4,350 single maps are recorded in the Library's official catalogue. Another 189 maps await cataloguing for a total of 4,539 maps.

A strict count of the early atlases in the collection would be impossible to record here because some of them are included among our incunabula holdings, some in our continental imprints collections, others included among the early Americana. A rough guess would place the Library's holdings of atlases printed before 1800 to around 500 titles.

A quick rundown of some of the great geographers and atlas makers reveals that the Huntington holdings are quite respectable. Of the editions of Claudius Ptolemaeus' *Cosmographia*, the Library can count 36 editions on its shelves dating from 1475 to 1700. Stevens bibliography lists 58 editions before 1700. Included in this group is the 1482 Ulm edition, the first atlas with woodcut maps.¹ There are eight editions of Sebastian Munster's *Cosmographia Universalis* dated before 1630.

The atlases of Abraham Ortelius stand or lie in splendor on our Library shelves, many of them in contemporary vellum bindings with contemporary hand-colored maps. Twelve editions of various Ortelius atlases date from 1470 to 1603.²

The atlases of the Amsterdam family of Blaeu are present in respectable numbers including *Le Grand Atlas* in 12 volumes of 1663 and the *Grooten Atlas* of 1642-1665, 9 volumes extended to 11 with the addition of many rare Dutch maps and views. William Blaeu is also represented by a beautiful celestial globe of 1602 and a large handsome terrestrial globe of 1617. (Incidentally, the Blaeu terrestrial globe is the first dated map or globe to show Manhattan as an island.) While on the subject of globes, the Library also has, on permanent exhibit, a matched pair of celestial and terrestrial globes made by Jodocus Hondius in Amsterdam in 1600.

Still on the subject of globes, one must not forget the rare little 3-inch terrestrial globe made and sold by the London printer and publisher Joseph Moxon. Only one other copy of this portable pocket globe is known to exist. On it California is carefully shown as an island which in Moxon's words "was formerly thought to be a part of the mainland." The globe fits into a leather carrying case which, when opened, reveals the two halves, "concave hemispheres of the starry orb."

The Dutch geographer and atlas publisher, Jan Jansson, is represented

by four atlases dated between 1647 and 1662, including his great atlas of 1650 the *Novus Atlas* of 11 volumes. The later Dutch atlas publisher, Nikolass Visscher, is represented by four early eighteenth century atlases. Two editions of Georg Braun *Civitatis Orbis Terrarum*, are present in the Library, the first edition of 1593 and the expanded edition of 1612-17. Last, but certainly not least, of the early great Dutch geographers to be mentioned here is Gerardus Mercator. Possibly because his name has become a part of map technology, and because several of his atlases were done in English, he is more familiar to many of us. The Library has seven Mercator atlases dating from 1595 to 1637, including two copies of the 1636 atlas printed in Amsterdam but in English, and one copy each of the London 1635 and 1637 atlases.

The French geographer, Jacques Nicholas Bellin is represented by four 18th century atlases on our shelves. One separate French atlas that should be mentioned is a fine tall copy with contemporary coloring of *Le Neptune Francois*, Paris, 1702. This is the edition with the full page plates of various types of contemporary ships issued with the maps.

Nearly all of the important English atlases published before 1640 are represented here in the Huntington Library in one or more editions. One of the earliest is Christopher Saxton's atlas of county maps of England and Wales, London, 1579. The Library has two separate issues of this scarce compilation. One of them is bound in a beautiful presentation binding with an inscription from the author to the Earl of Ellesmere.

Lucas J. Waghenauer's *Mariners Mirror*, [London, 1588] is present, as are four editions of William Camden's *Britannia*, dated 1607, 1610 (2 copies), 1626 and 1637. John Speed's great work, *The Theatre of the Empire of Great Britaine*, with its 67 maps of England, Scotland and Ireland, is present in the first edition of 1611-12 and the reprint of 1679.

The Huntington Library is not quite as strong in its holdings of English atlases in the later part of the seventeenth century. Moses Pitt's large, four volume *English Atlas*, Oxford, 1680-83, is present in two copies, one colored, one uncolored. But of Robert Morden's four editions of *Geography rectified*, the Library has only the third edition of 1693. Possibly a unique curiosity of this period is a collection of map playing cards, small engraved maps with English and Latin place names, pasted on cards 4 1/2 inches high by 3 inches wide. There are 48 cards in a set, 16 each of America, Asia and Africa. They have been tentatively dated circa 1680.

The English 18th and early 19th century atlases are fairly well represented. The five fat octavo volumes of the *Atlas Geographus*, with its wordy text and folding maps, published in the Savoy 1711-17, is present in a contemporary binding. Quickly, in chronological order, one can find John Senex, *New general atlas*, London, 1721; Edward Wells, *A new sett of maps*, two editions about 1730 and 1750; Herman Moll, *Atlas Minor*, 1736; Alexander Dalrymple, *A Collection of charts, plans or ports, views, etc.*, 4 volumes, London, 1771-96; and two editions of Thomas Kitchin's *A general atlas*, 1768

and 1771.

The American Revolution is well represented in atlases. William Faden's *Atlas of battles of the American Revolution* is presented in the re-issue of the original maps with the 1845 title page. We also have many separate maps removed from the original edition of 1793. Thomas Jeffrey's *American Atlas* of 1776 is present as are other later compilations including the second and best edition also [1776].

But the grandest and most noble of them all, and my favorite of the lot, is the elephant folio *Atlantic Neptune*, compiled by Frederick Walle Des Barres and published for the use of the Royal Navy of Great Britain, in London in 1780. As a mere youth, many years ago, I was charged with the task of collating the Huntington copy of this work with a description of another copy offered by Quaritch in London. I came away starry-eyed and spellbound after viewing the magnificent charts and views of the coast and cities from Nova Scotia to Havana. The work contains 139 charts, plans and views of much of this area. Fine large aquatint views of New York, Boston, Havana, Halifax, Quebec and Louisbourg depict these cities as they looked during the Revolution. The work was published at the expense of the Royal Navy and apparently no money was spared in producing it. I certainly feel that the Royal Navy got its moneys worth. Incidentally, after collating the Huntington set, I discovered that practically no two sets are exactly the same. One reason being that navy ships on various stations would need certain maps more than others.

I have chosen to conclude this brief description of English cartography with the *Atlantic Neptune*. The English maps and atlases of the nineteenth century in the Library are not a significant collection. Instead let us turn to American maps and, with your permission, confine this report to American maps printed within the present limits of the United States.

With American printed maps there is definitely a beginning, as the first map printed in America says so in the legend. It is, as many of you know, the woodcut map which appears in William Hubbard's *A narrative of the troubles with the Indians in New-England*, Boston, John Foster, 1677. The map which was apparently cut on a woodblock by the printer, John Foster, covers the coast of New England and perhaps 150 miles inland, from the Kennebec river in Maine to the Connecticut river and New Haven on the south. The legend, which I would like to quote in full, is remarkable for its honesty and candor:

A Map of New England, | Being the first that ever was here cut,
and done by | the best Pattern that could be had, which being in |
some places defective, it made the other less exact, | yet doth it
sufficiently shew the Seituation of | the Country, and convenient-
ly well the | distance of Places,

the Huntington copy from Church 1911.

It might have been a good thing if later American cartographers had taken heed of this remarkable statement and perhaps tried as diligently to prepare accurate maps.

One who did, however, was Lewis Evans whose map of Pennsylvania, New Jersey, New York and Delaware was first published in Philadelphia in 1749. It was truly a remarkable production for one man. The Huntington Library has the 1749 edition and the 1755 Philadelphia and London revised edition plus the eighteen variants and piracys issued between 1755 and 1814. The whole story is told in Henry Stevens' excellent essay on Lewis Evans and his map, published in London in 1920.

A second great landmark map of the 18th century American frontier was John Filson's *Map of Kentucke*, engraved at Philadelphia in 1784 to accompany his *Discovery, settlement and present state of Kentucke*, Wilmington (Del.), 1784. The early history of Kentucky is recorded in remarkable detail on this map. The Library has not only the printed map but also the original manuscript map from which the engraving was made.

All of the important eighteenth and early nineteenth century accounts of discovery and voyages in the American hemisphere are present with their atlas volumes. I refer, of course, to Cook, Vancouver, Duflot de Mofras and other similar texts. Matthew Carey's *American pocket atlas*, Philadelphia, 1796, is present as well as various editions of Henry Schenk Tanner's atlases of the United States. Alas, the Matthew Carey atlas of 1796, the first real atlas printed in the United States is not present. We do, however, have considerable gaps in our collections of atlases of the United States issued, let's say, from about 1815 to 1860. We have all or nearly all of the various United States geographical surveys with their various big and little atlas volumes.

The United States publishing firms of Colton and Mitchell are both well represented by single maps as well as atlases. Phelps traveller's guides through the United States, issued during the 1840's and 50's with their folding maps, are present in many editions. To me they are especially tempting with their gilt morocco covers depicting contemporary steamboats and trains. In the same category, the Ensign and Thayer traveller's guides and maps of the same period can be found in quantity on the Library's shelves.

The Library's greatest in depth holdings of nineteenth century American maps is California and the southwest. All, or nearly all, of the California county atlases are on our shelves. Gold rush maps are present in quality and quantity. W. W. Robinson's *Maps of Los Angeles*, Los Angeles, 1966, list his opinion as to the 127 most important maps of Los Angeles, in manuscript or print, between 1849 and 1888. Fifty-five of those listed are located at our Library. Carl Wheat's monumental six volume bibliography *Mapping the transmississippi west*, San Francisco, 1957-1963, has not been checked against our holdings but I would wager a great deal that well over half of the titles recorded in that bibliography can be located in our map

collections.

In conclusion, I would like to mention briefly, the three map exhibitions with printed catalogues held at the Library. The formal exhibition program was first started in 1927 and specialized exhibits of short or long duration became a part of the program not long after. It was not until 1946, however, that the first map exhibition with a printed catalogue was mounted.

Entitled *America in Maps 1503-1600*, it was arranged by Herbert Schulz, former Curator of Manuscripts, and contained forty-five manuscript and printed maps from Ptolemaeus to the Wright-Molyneaux map of 1600. This catalogue is now out of print.

California in Maps 1541-1851 was mounted in 1949 and a catalogue was prepared by Willard O. Waters, Americana bibliographer at the time. Forty-three maps were shown from the Cortez map of 1541 to Benjamin F. Butler's *Map of the State of California* published in San Francisco in 1851. This catalogue is now also out of print.

The last map exhibition with a catalogue, again prepared by Herbert Schulz, was opened in March, 1963, and ran through September in the special exhibition hall. In seventeen cases, plus wall pieces, thirty-seven manuscript and printed maps were shown dating from 1482 to 1690. This catalogue is still available.

Notes:

¹ Michael Woodhull's copy, with maps colored in a contemporary hand.

² We do lack, however, the 1573 edition called by Tooley "the first uniformly sized systematic collection of maps of the countries of the world" in a sense the first modern atlas.

Cary S. Bliss is Curator of Rare Books, Huntington Library. Huntington Library's holdings of manuscript maps are described by Herbert C. Schulz, Norma B. Cuthbert and Haydee Noya, *Ten Centuries of Manuscripts in the Huntington Library*, San Marino, 1968.

THE ROYAL ENGINEERS' MAPPING OF BRITISH COLUMBIA: 1845 - 1906*

by

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The study of the historical cartography of British Columbia is a relatively new field, with many areas virtually untouched. This paper is more of a progress report than a detailed study. A. L. Farley, in his doctoral dissertation, "The Historical Cartography of British Columbia",¹ was the first to study the mapping of British Columbia and covered the entire period from pre-discovery to about 1917. Christine Cannon, in her thesis, "Mapping Western North America and Puget Sound",² is concerned with the delineation of Puget Sound in maps of the Northwest to about 1877. Don Thomson, in his Men and Meridians,³ has a few chapters on British Columbia in which he mentions some specific maps, but he is more concerned with the history of surveying in Canada. R. W. Sandilands has written a couple of papers on the history of hydrographic surveying in British Columbia,⁴ but again the emphasis is on the surveying, not the charts. Coolie Verner and Basil Stuart Stubbs include some British Columbia maps in their unpublished historical cartobibliography, "The North Part of America", and Dr. Verner covers some of the Arrowsmith maps in his work on the Arrowsmith firm.⁵ John Spittle has compiled a preliminary report on the maps of the Royal Engineers printed at their Camp at New Westminster.^{6-6a}

The work of the Royal Engineers in British Columbia has had a significant influence on the development of this Province in many areas,⁷ which is not yet fully appreciated. There were four distinct periods in which Royal Engineers were in British Columbia, between 1845 and 1906, and in each period maps were produced. Individually these maps are interesting, and some are of considerable importance. Together these maps represent an important part of our cartographic archives, as official records both in Great Britain, and in British Columbia, where they formed the foundation for first colonial, then provincial government surveying.

Surveying and map production were only two of the numerous tasks performed by the relatively small body of men making up the Corps of Royal Engineers, which was until 1856 an officer corps composed of the best educated and trained military officers. As the Corps was so small many of the officers knew each other, some serving at the same stations, and it is quite possible that information about an area such as British Columbia would be passed around among colleagues. Some evidence of this is seen when the Editor of the Emigrant Soldiers' Gazette and Cape Horn Chronicle,⁸ the newspaper produced by the Royal Engineers en route to British Columbia on the Thames City, 1858-1859, quotes from the "confidential" report of Lieutenants Warre and Vavasour.

Lieut. Henry James Warre, 14th Regt., aide-de-camp to his uncle Sir Richard Jackson, commander of the forces in Canada, and Lieut. Mervin Vavasour, Royal Engineers, were sent on a secret mission by the British Government, at the instigation of the Hudson's Bay Company, to determine the actual state of affairs in Oregon Territory and the possibilities for defence if war should break out with the Americans. They were to "proceed as private travellers"⁹

* Presented to the Fall Meeting of the Western Association of Map Libraries, at California State University, Fullerton, Friday, October 24, 1975.

and accompany the Hudson's Bay Company's brigade to Fort Vancouver, where they arrived August 25, 1845. Only Sir George Simpson, Governor of the Hudson's Bay Company, and one of his officers, Peter Skene Ogden, knew the real identity and purpose of the two officers, although there was much speculation among both the settlers and the Company personnel in Oregon. Before leaving Fort Vancouver on their return journey to Montreal on March 25, 1846, Warre and Vavasour had explored most of the country from Fort Vancouver to Oregon City and the Willamette Valley, the mouth of the Columbia and Fort Nisqually to Puget Sound and Fort Victoria. One of their instructions was to meet with the Commanders of Her Majesty's Ships and communicate with them.¹⁰ Undoubtedly their views were combined with those of the officers of H.M.S. America and delivered in Lieut. William Peel's reports to the Foreign Office in London in February 1846, influencing Britain's stand in negotiations resulting in the Oregon Treaty, or Treaty of Washington, signed 15 June 1846.¹¹

The detailed reports and maps produced by Warre and Vavasour have never been published *in toto*, though some selections appeared in the Oregon Historical Quarterly in 1909. In 1848 Warre published a book of sketches of his "Travels"¹³ to Oregon Territory, including a general map of the route from Montreal and back. The expedition reports in the Public Record Office, London, contain 28 maps, including some copies, in the Foreign Office and War Office files.¹⁴ One of Vavasour's tasks was to provide detailed plans of the Hudson's Bay Company forts west of Winnipeg, with assessments of their defence capabilities, and in many cases his are the only plans. Other maps include surveys of the American settlements in the Willamette Valley, the Columbia River, including plans for fortifying the mouth of the River, and the overland route to Puget Sound. These are among the earliest detailed maps of the Oregon settlements. The maps are quite remarkable when one considers the circumstances under which they were drawn. The two officers were travelling as tourists, and while it would be quite in order for Warre to sketch and paint his lovely scenes, Vavasour could not openly survey a site. The only instruments mentioned are spy glasses and a compass, which Warre refers to in his private diaries.¹⁵ No record has been found of what instruments Vavasour carried.

The Oregon dispute was settled with the acceptance of the 49th Parallel as the international boundary, but nothing was done about carrying out the 1st Article of the Treaty of Washington, which called for a survey to locate the actual boundary, until 1856 when Congress authorized the appointment of a commission. The American Northwest Boundary Commission began surveying at Point Roberts in 1857. The British North American Boundary Commission was divided into a Water Boundary Commission under Captain J. C. Prevost, R.N., and a Land Boundary Commission under Captain J. S. Hawkins, R.E., with six officers and 56 non-commissioned officers and men of the Royal Engineers. The survey was completed in the fall of 1862, having overcome the problems of extremely difficult terrain and expensive labour and supplies. The British maps and data were taken back to London where work continued towards the preparation of the final atlas, which was produced in 1869. Revisions were made following a meeting of the Joint Commission in Washington, and the final atlas was released in June 1871, with the imprint "Photozincographed at the Ordnance Survey Office, Southampton, under the superintendence of Capt. Parsons, R.E., F.R.A.S.: Col. Sir Henry James, R.E., F.R.S., etc., director, 1869". (Capt. Parsons had been in British Columbia with the Columbia Detachment.) Lieut. C. W. Wilson, R.E., who had been with the Commission in British Columbia, was by this time a captain, and was director of the Topographic Depot of the War Office, under Col. James, and Hawkins suggested Wilson as the logical person to make the required corrections to the maps.

Originally five copies of the British atlas were planned, one each for the United States and British Columbia governments, and three to be retained in London, by the Colonial Office, the Foreign Office, and the Topographic Depot of the War Office.¹⁶ However, plans were altered and it is uncertain how many atlases were produced and what became of them. One copy was delivered to Washington, June 23, 1871, and is now in the National Archives (R.G. 76). The Public Record Office has Hawkins' original atlas from the Foreign Office, with what appears to be a bound set of working maps, and one copy of the final bound atlas from the Colonial Office Library. One bound atlas and seven unbound sets of maps were sent to Canada in June 1871 (British Columbia entered Canadian Confederation in July 1871), but they have not been traced. No copy has been found in British Columbia. The Royal Geographical Society in London has an unbound set of the maps.

A description of the final atlas is found in a note pencilled on the fly-leaf of the Colonial Office atlas (C.O. 700 Canada no. 122) dated June 8, 1871, to the Under Secretary of State, Colonial Office from E. Hammond, Foreign Office, in which he refers to the ten copies sent to the Colonial Office, saying:

One of the copies is handsomely bound in Morocco for presentation to the Government of Canada. --another bound copy is intended for the Library of the Colonial Office. Those two copies contain each; a set of the 7 Maps of the Boundary signed by the British and American Commissioners, Colonel Hawkins and Mr Campbell; --and, in addition 2 Index Maps, 1 sheet of Photographs, 1 sheet of Tables of Latitudes and Longitudes, 6 Maps of the Boundary on a scale of 1 inch to a mile. A general Map in 3 sheets, on the smaller scale of .0528 inch to a mile.

The eight other copies are in sheets, and embrace the same Maps, with the exception of the general Map in three sheets, which would be expensive to print, and of little practical use.

It is to be distinctly borne in mind that the only Maps which are of authority are the seven in each set bearing the signatures of both the British and American Commissioner. The others have been prepared by the British Commissioner alone for the use of his own Government.¹⁷

The general map appears to have been reduced photographically in eighteen exposures. The atlases have the actual photographs mounted on three sheets. Hawkins noted in his own atlas (F.O. 925/1621) the American numbers of the seven official maps, as the American set was numbered from East to West, while the British followed the order of survey from West to East.

Some of the American and British records appear to have vanished, while others were lost for many years. The surviving American records are now in the National Archives (R.G. 76). The final American atlas was never published, due to the expense, but the seven sheets of the land boundary were lithographed and printed in a limited edition on the scale of 1:60,000, by the New York Lithographing, Engraving and Printing Company, some time before 1900. The British atlas is of considerable significance, not only as representing an international boundary agreed upon by two important powers, but as the basis for further surveys in the Pacific Northwest. The work of the British Commission was made available almost at once to their colleagues at the Royal Engineers Camp, New Westminster, while the work of the latter is acknowledged on the index maps in the boundary atlas.

The Royal Engineers at New Westminster were the Columbia Detachment which served in British Columbia from 1858 to its disbandment in 1863, at which time many of the men elected to remain in the colony as settlers, some continuing to work with the Lands and Works Office under the colonial government. The force, composed of six officers and 150 non-commissioned officers and men, was "sent for scientific and practical purposes, and not solely for military objects",¹⁸ as the Secretary of State for the Colonies reminded Governor James Douglas. The major tasks were surveying and road building. At least 29 maps were drawn and printed by the Engineers on their press between May 1861 and October 1863, as well as numerous as-yet-uncolated manuscript maps and plans. The printed maps were sold locally to the general public as well as being sent home to England. A number of advertisements have been found in the local newspapers for their sale, and, although few copies are extant, they have been found in libraries from San Francisco to London.

The Survey Department, which included the Royal Engineers Printing Office, was headed by Captain Robert Mann Parsons, the only non-volunteer with the Detachment, having been re-called from the Ordnance Survey in Ireland for the purpose. Captain Parsons supervised the preparation of the boundary atlas on his return to England. In a report¹⁹ to Colonel R. C. Moody, who was Commissioner of Lands and Works as well as being Commander of the Forces in British Columbia, Parsons says that sixteen of the non-commissioned officers and men were trained on the Ordnance Survey, including five who could take angular measurements, five draughtsmen, two engravers and one astronomer. There were also a printer, a printer-lithographer, and at least two photographers.

The original lithographic press seems to have been lost with other supplies when the Briseis burned at sea in December 1858, and a replacement did not come into service until April 1st 1861, when Parsons is directed to take charge of it.²⁰ In the meantime, maps were reduced and reproduced photographically, and in November 1859 about five maps were sent to London, two of which were lithographed at the Topographical Depot of the War Office. These were Plan of route from New Westminster to Fountain in British Columbia by Lieut. H. S. Palmer, R.E. (4 miles to 1 inch), and Sketch of part of British Columbia by Lieutnt. R. C. Mayne, R.N. of H.M.S. Plumper 1859 (500 yds to 1 inch). The use of photography in map reduction is rather remarkable in view of the fact that the Ordnance Survey had been using this method for only three years, and in June 1859 Col. James ordered the Irish Survey Office to continue sending plans to Southampton rather than purchase a camera and do the work in Dublin.²¹ Photography was included in the Royal Engineers curriculum in 1853, and its use in map reduction was probably learned in the Ordnance Survey course. In any case, by the time Col. James' Illustrated report on the reduction of plans by means of photography was received by Governor Douglas early in 1860, the technique was already in use. At present the identity of the photographers is uncertain, and the fate of the photographs and the camera are a mystery.

The first map printed in British Columbia was appropriately a plan of New Westminster, a city laid out by the Royal Engineers in 1859, the first city to be incorporated on the mainland, and the capital of the crown colony of British Columbia. At least twelve more plans and maps were printed that first year, 1861, including plans of Douglas, Hope, Lytton, and Yale, two hydrographic charts (Barclay Sound and Alberni Canal), a map of Thompson River District made in 1835 by a Hudson's Bay Company employee, and maps of several surveys made, including Sketch of trail from Lytton and Lillooet to Alexandria, and the Cariboo District, by Matt. B. Begbie, Judge of the Supreme Court November, 1861, of which two states have been found.

Seven maps were lithographed in 1862, including a hydrographic chart of Nanaimo Harbour, a copy of which has not been located. The first map printed was Sketch of Cariboo Mines by Mr. F. Black January 1862. In July a second plan of New Westminster was produced, including the new suburban lots. At least two states of this map were printed, one having a printed four-part reference key. In March appeared British Columbia. Hope to Similkameen and Rock Creek, Lillooet to Kamloops and Okanagan Lake, on the scale of 10 miles to 1 inch, with the notation: "The details of the Boundary Line were furnished by Lieut. Col. Hawkins R.E." In August a map of British Columbia on the scale of 50 miles to 1 inch appeared, acknowledging "Coast lines from Admiralty Charts, Interior from Explorations by Royal Engineers and others up to 1862, North of Fraser River from Mr. Arrowsmith, East of Columbia River from Mr. Palliser. This map will be reproduced when further information is obtained." The following month Parsons' Report of a journey from New Westminster to Lake La Hache was printed at the Royal Engineers Press, which contained two maps.

Six more maps were published in 1863, before the Detachment was disbanded and those returning home departed in November. In February two reports by Lieut. H. S. Palmer were printed at the Engineers Press. Report of a journey of survey, from Victoria to Fort Alexander, via North Bentinck Arm contained a "Skeleton map of part of British Columbia" on a scale of 50 miles to 1 inch, and "Sketch of the route from North Bentinck Arm to Fort Alexander" at 10 miles to 1 inch. His Report on the portions of the Williams Lake and Cariboo Districts, and on the Fraser River from Fort Alexander to Fort George included a "Sketch of part of British Columbia..." at 5 miles to 1 inch, and an "Extract from the General Map of British Columbia" at 50 miles to 1 inch. The following month a Sketch shewing the Government Reserves in the Quesnel District was printed. At least two of the maps published by the Engineers referred to a General Map in preparation. The final maps printed by the Royal Engineers, in September and October 1863, appear to be two sheets of the planned General Map. Parsons, in a letter to Col. Moody on October 13, 1863 says:

I enclose the Lithograph of Sheet 2 of a small map of British Columbia; it will be in our power to produce the Sheet north of it, No. 5, vide the enclosed diagram in ten days if I be permitted to retain Corporal Conroy for that period & Sapper Oldham for a few days to print the copies.

Sheet 5 will contain Cariboo and with Sheet 2 will shew the Gold Regions via the Waggon Roads, the Thompson River, & Bute Inlet also shewing a portion of the Bentinck Arm Route. Sheet 5 is so far advanced that it will I submit be a great pity to throw away the labour that has been bestowed upon it, and it cannot so well be taken up afterwards by other hands.²²

Permission was granted and the two sheets of what would appear to be a planned six-sheet map were completed. The Royal Geographical Society has the two sheets joined, but the Public Record Office has only Sheet 5.

Two more maps are included here, which were published at the Lands and Works Office, New Westminster, by some of the ex-Engineers working for the colonial government, and using the old Royal Engineers press. The first map, which appears to have been produced in 1864 or 1865, is an untitled map of British Columbia on a scale of 10 miles to 1 inch, in six sheets, with an

extension of Sheet 3. A number of changes have been made, notably in the delineation of Shuswap Lake. The final map is the Guide map to the Big Bend Mines (on the Columbia River) shewing the route from New Westminster which appeared February 5, 1866. This map was drawn by J. B. Launders, the ex-Engineer who draughted the famous "Trutch Map" of British Columbia in 1871. This Guide map appears to be the last map to be printed on the Engineers press. The Trutch map was printed in London by Stanford. The fate of the Engineers' lithographic press, like that of their camera, is a mystery.

There were a few Royal Engineers here for short periods between 1871 and 1893, when another detachment was stationed at Esquimalt, near Victoria, until 1906. Most of the maps produced by them are unpublished plans relating to defence sites and installations. In 1879 Col. J. W. Lovell, a Royal Engineer stationed at Halifax, represented Great Britain in a joint military survey with the Canadian Government, of British Columbia. A thorough inspection was made of southeastern Vancouver Island and the lower mainland defences, centering on Esquimalt, and both Lovell and the Canadian representative made a number of recommendations. On July 29, 1886, Lieut.-Col. E. D. C. O'Brien, R.E., arrived at Esquimalt with a group of non-commissioned officers (surveyors from 18th Company, Royal Engineers, stationed at Halifax) to survey the land and select sites for permanent forts. On November 18, 1886, H. G. Weedes of the War Office wrote to the Colonial Office:

Sir, I am directed by the Secretary of State for War to acquaint you, for the information of the Secretary of State for the Colonies, that a party of Royal Engineers is now at Esquimalt surveying sites for the proposed works of Defence.

These special Surveys are nearly completed, but as it appears that there is no survey of the ground in the vicinity of Esquimalt it is proposed to survey the whole district within four miles of Signal Hill.

This survey will be valuable from a Defence Point of view, but it will also be valuable to the Colonists for Civil purposes.

I am accordingly to request that you will move the Right Hon. E. Stanhope to favour Mr Secretary Smith by stating whether the Colony will contribute half of the cost of this survey which will probably amount to £600 altogether.

I am to add that as it is understood the Colony is voting a sum of money for defence works, the moiety of the expenditure herein proposed to be borne by the Colony might be charged against that vote.²³

Nearly a year later, on October 20, 1887, the Minister of Militia and Defence was informed by the Executive Council that "The Minister cannot at present recommend such an expenditure." In December 1886, Lieut. J. I. Lang arrived from Halifax to continue the survey, and the map of the greater Victoria area was completed in 1888, in six sheets on the scale of six inches to the mile, with an index sheet on the scale of one inch to the mile. According to F. V. Longstaff, the six sheets "were soon published in England and were for many years the finest maps of any part of B.C."²⁴ Only one copy of this map has been found, in the National Map Collection in Ottawa. The Public Record Office has only the index sheet, which is described in the catalogue as "printed". This map needs much more examination. Its rarity is curious in the light of Longstaff's comment.

On May 15, 1888, both the Vancouver City Council and the Vancouver Board of Trade petitioned the Government to have the Royal Engineers extend their survey of defences to Vancouver, but there is no evidence of any further surveys, and on 9 May 1890 requests for Vancouver's defences were filed "for consideration in due time."²⁵

A number of manuscript plans of defensive sites in the Victoria area were made by the Royal Engineers during their stay at Esquimalt between August 1893 and July 1906, when they were replaced by the Royal Canadian Engineers. Most of these plans are attached to documents in Ottawa and London, and not all are even recorded. The withdrawal of the Royal Engineers marked the end of British mapping of land in British Columbia (the Royal Navy did not withdraw until the formation of the Royal Canadian Navy in 1910, and the Canadian Hydrographic Service produced its first chart the following year).

Much more needs to be done to locate and record the maps of the Royal Engineers, and to assess their importance in the cartographic history of British Columbia.

FOOTNOTES

1. A. L. Farley, "The historical cartography of British Columbia", Madison, University of Wisconsin, Unpublished Ph.D. thesis, 1960. 378 p., appendix and atlas.
2. C. J. Cannon, "Mapping western North America and Puget Sound", Seattle, University of Washington, Unpublished M.A. thesis, 1969. 218 p., illus.
3. Don W. Thomson, Men and Meridians, Ottawa, Queen's Printer, 1966-1969. 3 vols., illus.
4. R. W. Sandilands, The history of hydrographic surveying in British Columbia..., Victoria, Canadian Hydrographic Service, 1965? 41 p., illus.
---, "The history of hydrographic surveying in British Columbia", Association of Canadian Map Libraries, Proceedings, v. 4, June 1970, pp. 22-40.
5. Coolie Verner, "The Arrowsmith firm and the cartography of Canada", Association of Canadian Map Libraries, Proceedings, v. 4, June 1970, pp. 16-21, reprinted in Canadian Cartographer, v. 8, no. 1 (June 1971), pp. 1-7, illus.
Alexander McGechaen and Coolie Verner, "Maps in the Parliamentary Papers by the Arrowsmiths: a finding list, Part II", Map Collectors' Series, v. 9, no. 89, 1973, pp. 39-68.
6. John D. Spittle, "Early printed maps of British Columbia", Association of Canadian Map Libraries, Proceedings, v. 7, June 1973, pp. 16-30.
- 6a. The author is indebted to Mr. John Spittle for his assistance with the maps of the Columbia Detachment.
7. Frances M. Woodward, "The influence of the Royal Engineers on the development of British Columbia", B C Studies, no. 24 (Winter 1974-75), pp. 3-52, illus.
8. The Emigrant Soldiers' Gazette and Cape Horn Chronicle, with map and illustrations, with addenda by Lieut.-Colonel R. Wolfenden, I.S.O., V.D. ([Victoria, King's Printer] 1907) No. 16, March 12, 1859, p. [2].

9. Lord Aberdeen to Lord Stanley, April 3, 1845, F.O.5/457 America, "Expeditions of Lieuts. Warre and Vavasour to the Oregon Territory." See: "Documents relative to Warre and Vavasour's military reconnoissance in Oregon, 1845-6," edited by Joseph Schafer, Oregon Historical Quarterly, v. 10, no. 1, March 1909.
10. Henry James Warre, "Travel and sport in North America, 1839-1846", type-script, p. 52. Public Archives of Canada, M.G. 24 F71.
11. Woodward, p. 5, 8.
12. Joseph Schafer, ed., "Documents relative to Warre and Vavasour's military reconnoissance in Oregon, 1845-6", Oregon Historical Quarterly, v. 10, no. 1, pp. 1-99, illus.
13. Henry James Warre, Sketches in North America and the Oregon Territory, [London] Dickinson & Co.[1848] 5, 16 p., illus.
14. Public Record Office, F.O. 5/457, maps in MPK 59; W.O. 1/552, maps in MPH 459 (3)-(8).
15. Public Archives of Canada, Henry James Warre Papers, M.G.24, F71, pp. 1029, 2168, 2353.
16. Otto Klotz, Certain correspondence of the Foreign Office and of the Hudson's Bay Company, copied from original documents, London, 1898..., Ottawa, 1899. p. 15 Hawkins to F.O., New York, 15 May 1869.
17. P.R.O., C.O. 700 Canada no. 122, fly-leaf.
18. Rt. Hon. Sir E. B. Lytton to Gov. James Douglas, July 31, 1858, Despatch no. 6 in Papers relative to the affairs of British Columbia, Part I [i.e. B C Papers] London, 1859, p. 45.
19. B C Papers, II, pp. 63-64, January 1, 1861.
20. Provincial Archives of British Columbia, Colonial Correspondence, R. E. memo book, April 1, 1861 (C/AB/30.6J).
21. Letter from John Andrews, Dept. of Geography, University of Dublin, 16 September 1975.
22. PABC, Colonial Correspondence, Parsons to Moody, October 13, 1863 (F1313-10).
23. PAC, R.G.9 IIA1 v. 612 "Defences of Pacific Ports 1885-1887", "A6286".
24. F. V. Longstaff, Esquimalt Naval Base, a history of its work and its defences, Victoria, 1941, p. 46.
25. PAC, R.G. 9 II A1 v. 612.

MAPS OF THE ROYAL ENGINEERS IN BRITISH COLUMBIA 1845 - 1906

I. 1845-1846 Warre & Vavasour Expedition

[A Route of expedition from Sketches in North America and the Oregon Territory] [London] Dickinson & Co. [1848]

Map published with Warre's Sketches.

Sketch shewing the route (in red) from Red River to the Pacific Ocean. 12" x 15" Inset: Fort Garry 2.5" x 2.75"

Title on reverse: Sketch of the route of Lieut. Warre and Lieut. Vavasour from Red River to the Pacific Ocean 1845.

Manuscript map, probably drawn by Vavasour. P.R.O., MPHH 459(8).

Plan of Fort Colville Columbia River [by] M. Vavasour Lieut. Royal Engrs. 100' = 1" 17" x 11" P.R.O., MPK 59(14); F.O.5/457

Plan of mud Fort at Walla Walla Columbia River [by] M. Vavasour Lieut. Royal Engrs. 100' = 1" 12" x 11" P.R.O., MPK 59(15); F.O.5/457

Sketch of Fort Vancouver, and adjacent plains [by] M. Vavasour Lieutt. Royal Engrs. 1845. 4" = 1 m. 16.75" x 21" Inset: Plan of Fort Vancouver 6" x 8" P.R.O., MPK 59(6); F.O.5/457

MPK59(5) unsigned copy, lacking inset. Appears to be first map, with relief.

Sketch of Fort Vancouver, and adjacent plains which are partially flooded in the spring [by] M. Vavasour Lieut. Royal Eng. 1845. 4" = 1 m. 9" x 25" P.R.O., MPHH 459(7); W.O.1/552 p. 440.

Fair copy of previous map, with most of relief deleted.

Plan of Fort Vancouver Columbia River [by] M. Vavasour Lieut. Royal Eng. 1845. 100' = 1" 7.5" x 10" P.R.O., MPHH 459(6); W.O.1/552 p.440.

Fair copy of inset from MPK 59(6) with buildings lettered, key below.

Plan of the entrance of the Columbia River, with the old directions for entrance...this sketch was taken from a chart belonging to the HHBC to which are added the late changes in the sands marked in red [by] M. Vavasour] 17" x 30.75" P.R.O., MPK 59(12); F.O.5/457

Rough chart of the Columbia River from the head of the navigation to the Pacific Ocean from a sketch belonging to the H.B.C. to which have been added the soundings opposite Vancouver and at the mouth of the Willamette, also the alterations in the sands at the mouth of the River [by] M. Vavasour Lieut. Royal Engrs. 1" = 1 naut. m. 33.75" x 21.25" P.R.O., MPK 59(13); F.O.5/457

Plan of Cape Disappointment [by] M. Vavasour Lieut. Royal Engrs. 10" = 1 m. 17" x 20" P.R.O., MPK 59(2); F.O.5/457

MPK 59(1) signed by Warre

Plan of Tongue Point on the South shore of the Columbia River [by] M. Vavasour Lieut. Royal Engrs. 5 chains = 1" 21.75" x 17" P.R.O., MPK 59(9); F.O.5/457

Sketch shewing the site of the Oregon City on the Willamette River [by] Henry J. Warre Lt. 14 Regt [&] M. Vavasour Lt. Royal Engrs.
4" = 1 m. 10.75" x 16" P.R.O., MPK 59(19); F.O.5/459

Eye sketch of the route from the Columbia River to Nisqually on Pugets Sound [by] Henry J. Warre Lt. 14 Regt [&] M. Vavasour Lieut. Royal Engrs. 5 m. = 1" 10.5" x 16.25" P.R.O., MPK 59(4); F.O.5/457

MPK 59(3) signed by Warre alone; slight differences.

Eye sketch of the plains & about Nisqually at the head of Pugets Sound woods coloured green the roads are merely Indian paths [by] M. Vavasour Lieut. Royal Engrs. 1" = 1 m. 19.5" x 27.5" P.R.O., MPK 59(11); F.O.5/457

Sketch of Nisqually and adjacent plain on Puget's Sound. 1" = 1 m. 19.5" x 26" P.R.O., MPH 459(4); W.O.1/552 p. 440

Unsigned; appears to be fair copy of above.

Sketch of Cammusan Harbour Vancouver's Island shewing the position of Fort Victoria, from a drawing of Js. Scarboro Capt. HHBC...[by] M. Vavasour Lieut. Royal Engrs. 200 yds = 1" 18.5" = 1" Inset: Plan of the Fort 100' = 1" P.R.O., MPK 59(10); F.O.5/457

Sketch of Cammusan Harbour; south end of Vancouver's Island Straits of De Fuca shewing position of Fort Victoria & Soundings. Lat. 48° 26' N. Longd. 123° 9' W. ... 100 fathoms = 1" 12" x 15" P.R.O., MPH 459(3); W.O.1/552 p. 440

Unsigned, but appears to be fair copy of above.

Plan of Fort Victoria Vancouver's Island Cammusan Harbour [by] M. Vavasour Lieut. Royal Eng. 1845. 100' = 1" 7" x 10.5" P.R.O., MPH 459(5); W.O.1/559 p. 440

Fair copy of inset in MPK 59(10) with key to buildings.

Plan of Fort Edmonton on the Saskatchewan River [by] M. Vavasour Lieut. Royal Engrs 1846. 100' = 1" 10.75" x 16" P.R.O., MPK 59(20); F.O.5/457

Plan of Fort Ellice on Beaver Creek near the Asseneboine River [by] M. Vavasour Lieut. Royal Engrs. 1846. 100' = 1" 14.5" x 11" P.R.O., MPK 59(16); F.O.5/457

Plan of Fort Carlton on the Saskatchewan River [by] M. Vavasour Lieut. Royal Engrs 1846. 100' = 1" 16.75" x 10.75" P.R.O., MPK 59(17); F.O.5/457

Plan of Fort Pitt on the Saskatchewan River [by] M. Vavasour Lieut. Royal Engrs. 1846. 100' = 1" 11" x 16" P.R.O., MPK 59(18); F.O.5/457

All the maps from the Public Record Office are manuscripts; most have some colour.

II. 1857-1862 North American Boundary Commission

Maps of the Land Boundary between the British Possessions in North America and the United States, as established by the Treaty of Washington, 15th June, 1846, and surveyed and marked under the direction of the Joint Commission appointed to carry into effect the 1st. Article of the Treaty. Scale 1/120,000 or 1.8939 statute miles to 1 inch. Photozincographed at the Ordnance Survey Office Southampton under the superintendence of Captain Parsons R.E.; F.R.A.S. Colonel Sir Henry James R.E.; F.R.S., &c. Director.-1869. 23 sheets.

Index map compiled from the following authorities. Admiralty Charts. Colonial Surveys. U.S. Military Surveys. Surveys. Joint Boundary Commission. 1:600,000 2 sh.

Official maps 1:120,000 7 sh.; tables 1 sh.; photographs 1 sh.

Title page to 1:63360 with 6 sh.

Maps to illustrate the boundary line established by the Convention of London, 20th. October, 1818, and the Treaty of Washington, 15th. June, 1846, between the British Possessions in North America and the United States. Compiled from the following authorities....Scale of .0528 inches to 1 statute mile, or 1/1,200,000

P.R.O. copies: F.O. 925/1621 Hawkins' original atlas; sheets signed "J. S. Hawkins Colonel Rl. Engrs. H.M. Commissioner 7th May 1869"

C.O. 700 Canada 122 final atlas, from Colonial Office Library. Some sheets have revised imprint of Topographical Depot, War Office, 1871.

F.O. 925/1623 bound set of loose maps (unsigned), including 3 general map sheets with trails in red and signed "Certified to be a true copy of the original plan - Henry James, Colonel R. Engrs. 5 April 1869"

R.G.S. copy: Canada S155 set of final maps, unbound, lacking the general maps.

III. 1858-1863 Columbia Detachment

Plan of route from New Westminster to Fountain in British Columbia by Lieut. H. S. Palmer, R.E.; lithographed at the Topographical Depot of the War Office, Col. H. James, R.E., Director, 1859. 1" = 4 m. 25" x 34.2"

Sketch of part of British Columbia by Lieutnt. R. C. Mayne, R.N. of H.M.S. Plumper 1859: lithographed at the Topographical Depot of the War Office, Col. H. James, R.E., Director, 1859. 1" = 500 yds. 39.6" x 27.7"

New Westminster British Columbia; drawn by Lance Corporal James Conroy, R.E.; printed by Sapper William Oldham R.E. Lithographed at the Royal Engineer Camp. New Westminster, May 1861, by order of Col. R. C. Moody, R.E. &c. &c. 12" = 1 m. 1:5280 30.7 x 46.5 cm. Inset: Reduced from a survey by Captn. G. H. Richards, R.N. 1" = 10 m. 1:633600 10.2 x 10.5 cm.

Douglas British Columbia; drawn by James Conroy, R.E.; printed by William Oldham, R.E.; surveyed by Serjt McColl and Sapper A. Breakenridge R.E. Lithographed under the direction of Captn Parsons, R.E. New Westminster May 1861 by order of Col. R. C. Moody, R.E. &c. &c. 25.355" = 1 m. 1:2500 31 x 41.2 cm.

Hope British Columbia; drawn by J. Launders, R.E.; printed by Wm Oldham R.E.; surveyed by Serjt McColl, R.E. Lithographed under the direction of Captain Parsons, R.E. New Westminster, May, 1861, by order of Col. R. C. Moody, R.E. &c. 12" = 1 m. 1:5280 10.8 x 46.1cm.

British Columbia Thompson River District; drawn by R. Armstrong, R.E.; printed by W. Oldham, R.E. Lithographed under the direction of Captn Parsons, R.E. New Westminster, July 1861, by order of Col. R. C. Moody, R.E. &c. 1:1,000,000 approx. 51.9 x 39.4 cm.

"From a Map in the possession of H.E. Gov. Douglas, C.B. made in 1835 by S. Black Esq. H.B. Company's Service. The positions of New Westminster, Douglas and Hope, are those determined by the Royal Engineers."

Lytton British Columbia; drawn by James Conroy R.E.; printed by W. Oldham R.E.; surveyed by Serjt McColl R.E. Lithographed under the direction of Captn Parsons, R.E. New Westminster, August, 1861 by order of Col. R. C. Moody, R.E. &c. 25.344" = 1 m. 1:2500 31.1 x 41 cm.

Lytton and its buburbs; from a survey by Serjt. W. McColl Rl. Engrs. June 1860; drawn by C. Sinnett R.E. under the direction of Captn Parsons R.E. at the Office of Lands & Works New Westminster, August 1861, by order of Col. R. C. Moody, R.E. &c; lithographed by W. Oldham, R.E. 6" = 1 m. 1:10,560 15.2" x 10"

British Columbia New Westminster to Lillooet from a general map in preparation by the Royal Engineers; reduced and drawn by R. Armstrong, R.E.; lithographed by W. Oldham R.Eng. Prepared under the direction of Capt. Parsons R. Engrs. New Westminster, August 1861 by order of Col. R. C. Moody, R.E. &c. 10 m. to 1" 1:633,600 46.7 x 37 cm.

Note on positions determined.

Yale British Columbia; drawn on stone by R. Armstrong R.E.; printed by W. Oldham R.E. Lithographed under the direction of Captain Parsons R.E. New Westminster Septr 1861 by order of Col. R. C. Moody R.E. &c. 1" = 200' 1:2400 26.5 x 39 cm.

"Revised from a survey which appears to have been made in 1858, before the arrival of the Royal Engineers in British Columbia."

Sketch of route from Alexandria, to Bentinck inlet, by Captn. Cavendish Venables, October, 1861; drawn by J. Launders, lithographed by W. Oldham, R.E. at the R.E. Survey Office New Westminster. 1:1,740 approx. 27.5 x 43.4 cm.

British Columbia, sketch of trail from Lytton and Lillooet to Alexandria, and the Cariboo District, by Matt. B. Begbie, Judge of the Supreme Court November, 1861. Lithographed at the Royal Engineers Camp, New Westminster. 1" = 10 m. 1:633,600

R.G.S. Canada S25 only 1 line of Longitude.

P.R.O., C.O. 700/8(7) Begbie's note, title & signature spaced differently, printing statement deleted.

Vancouver Island Barclay Sound by Captn. G. H. Richards and the officers of H.M.S. Hecate, 1861. Lithographed at the Royal Engineer Camp, New Westminster, B.C. 10 cables & 4 nautical miles = 12.8 cm. 1:73,000 45.4 x 58.7 cm. "Soundings in fathoms"

Vancouver Island Barclay Sound Alberni Canal by Captn G. H. Richards and the officers of H.M.S. Hecate 1861. [New Westminster, R.E. Survey Office, 1861] 10 cables & 4 nautical miles = 12.8 cm. 1:73,000 58.4 x 45.5 cm.

British Columbia; drawn by J. Launders, R.E.; printed by W. Oldham, R.E. [New Westminster, R. E. Camp, 1861] 1:633,000 14.2 x 18.2 cm.

From Abstract of Meteorological Observations, taken at the Royal Engineer Camp, during the year 1861, by order of Col. R. C. Moody, R.E., Commanding the Troops. Also included in Report for 1862.

Reserves on the Anderson and Fraser Rivers [&] 9 Mile Creek 9 miles above Boston Bar on left bank of Fraser River; drawn by C. Sinnett R.E.; lithd. by W. Oldham R.E. [New Westminster, R. E. Camp, 1861?] 6" = 1 m. 15.5" x 10.25" approx. "R. E. Survey Office"

Sketch from Lillooet to Quesnelle river, by Mr. G. B. Wright; drawn by J. Launders, R.E.; printed by W. Oldham, R.E. [New Westminster, R. E. Survey Office, 1861?] 48.5 x 38.5 cm.

[Nanaimo Harbour, by Captn. G. H. Richards...1862. New Westminster, R. E. Survey Office, 1862] NO COPY LOCATED

Sketch of Cariboo Mines by Mr. F. Black January 1862; approximate scale 10 miles to one inch; drawn by J. Turnbull R.E.; lithographed by W. Oldham R.E. by order of Col. Moody R.E. Comt &c. &c. [New Westminster] Lands & Works Office, 1862. 1:63,360

New Westminster, British Columbia; drawn by J. Launders, R.E.; printed by W. Oldham, R.E. Lithographed under the direction of Captn Parsons, R.E. New Westminster, July 1862, by order of Col. R. C. Moody, R.E. &c. 12" = 1 m. 1:5280 37.5 x 49.7 cm.

British Columbia. Hope to Similkameen and Rock Creek, Lillooet to Kamloops and Okanagan Lake; drawn by J. Conroy R.E.; lithographed by W. Oldham R.E. Prepared under the direction of Capt. Parsons R.E. New Westminster, March 1862, by order of Col. R. C. Moody R.E. &c. 1" = 10 m. 1:633,600 37.1 x 46.9 cm.

"...The details of the Boundary Line were furnished by Lieut. Col. Hawkins R.E. This Map will be reproduced when further information is obtained."

British Columbia; reduced and drawn by J. Conroy R.E.; lithographed by W. Oldham R.E. Prepared under the direction of Captn Parsons R.E. at the Office of Lands & Works New Westminster, August 1862, by order of Col. R. C. Moody, R.E. &c. &c. &c. 1" = 50 m. 1:3,168,000 37.4 x 47.2 cm.

"Coast lines from Admiralty Charts, Interior from Explorations by Royal Engineers and others up to 1862. North of Fraser River from Mr. Arrowsmith, East of Columbia River from Mr. Palliser. This map will be reproduced when further information is obtained."

Sketch to accompany report of 16th September 1862, by Captn. Parsons R1 Engrs; drawn by J. Conroy R.E.; lithd by W. Oldham R.E. [New Westminster, Royal Engineer Press, 1862] 1:633,600 21.7 x 13.2 cm.

From Parsons' Report of a journey from New Westminster to Lake La Hache, Royal Engineer Press, New Westminster, 16th September, 1862.

British Columbia; drawn by C. Sinnett R.E.; printed by W. Oldham R.E. 1" = 50 m. 1:3,168,000 21.8 x 13.1 cm.

From Parsons' Report of a journey from New Westminster to Lake La Hache, Royal Engineer Press, New Westminster, 16th September, 1862.

Sketch of the route from North Bentinck Arm to Fort Alexander, by Lieut. H. S. Palmer R.E. to accompany report of 24th Novr. 1862; drawn by C. Sinnett R.E.; lithd by W. Oldham R.E. Prepared by the Royal Engineers at the Office of Lands and Works New Westminster, by order of Col. R. C. Moody R.E. &c. &c. Feby 1863. 1" = 10 m. 1:633,600 37.3 x 50.7 cm. Inset: Sketch of the head of North Bentinck Arm 2" = 1 m. 1:31,600 17.2 x 19.3 cm.

From Palmer's Report of a journey of survey, from Victoria to Fort Alexander, via North Bentinck Arm. Royal Engineer Press, New Westminster, British Columbia, 1863. Map "No. 1".

Skeleton map of part of British Columbia; drawn by J. Turnbull R.E.; printed by W. Oldham, R.E. Prepared by the Royal Engineers at the Office of Lands & Works, New Westminster by order of Col. R. C. Moody, R.E. &c. &c. February 1863. 1" = 50 m. 1:3,168,000 22.5 x 24.3 cm.

"No. 2" from Palmer's Report of a journey of survey, from Victoria to Fort Alexander....

Sketch of part of British Columbia by Lieutt H. S. Palmer, R.E. to accompany report of 21st February, 1863; drawn by J. B. Launders, R.E.; printed by W. Oldham R.E. Prepared by the Royal Engineers at the Office of Lands and Works, New Westminster, British Columbia, Feby 1863, by order of Col. R. C. Moody, R.E. &c. &c. 1" = 5 m. 1:316,800 52 x 38.9 cm.

From Palmer's Report on the portions of the Williams Lake and Cariboo Districts, and on the Fraser River from Fort Alexander to Fort George. Royal Engineer Press, New Westminster, British Columbia, 1863.

Extract from the General Map of British Columbia; drawn by J. Turnbull R.E.; printed by W. Oldham R.E. R.E. Camp New Westminster 21st Feby 1863. 1" = 50 m. 1:3,168,000 15.1 x 10.3 cm.

From Palmer's Report on the portions of the Williams Lake and Cariboo Districts....

Sketch shewing the Government Reserves in the Quesnel District; drawn by J. Turnbull, R.E.; printed by W. Oldham R.E. Royal Engineers' Camp, New Westminster, 2nd March, 1863. 1" = 2.5 m. 1:158,000 37 x 28.7 cm.

British Columbia; reduced & drawn by J. Conroy R.E.; lithd. by W. Oldham R. Engr. Prepared under the direction of Captain Parsons R.E. New Westminster, Septr. [October] 1863, by order of Col. R. C. Moody, R.E. &c. &c. 1" = 20 m. 2 sh., 10" x 15.5" each

2 sheets of planned General map; Sh. 2 Septr. 1863; Sh. 5 October 1863; combined size: 20.5" x 15.5"

[British Columbia. New Westminster] Lithographed at the Lands & Works Office [1864?] 1" = 10 m. 1:633,600 70x142 cm. 6 sh. in 7.

Prepared by ex-Royal Engineers, and printed on old R.E. press.

Guide map to the Big Bend Mines (on the Columbia River) shewing the route from New Westminster; drawn by J. B. Launder at the Lands & Works Office. Joseph W. Trutch Chief Commissioner Lands and Works, and Surveyor General, New Westminster, February 5th 1866. 1:1,584,000 73 x 52 cm. 2 sh.

The portion of this map in British Columbia, is compiled chiefly from government reconnaissances and recent surveys, and is in its main points correct."

The last known map printed on the old R.E. press.

There are a number of manuscript maps by the Royal Engineers in the Legal Surveys Division of the British Columbia Lands Service, Victoria.

IV. 1871-1906

Vancouver Island, British Columbia; surveyed and contoured by Lieutenant J. I. Lang, R.E. in 1887.-8.; drawn by E. Hopkins, C.S.M.R.E. 1:10560 6" = 1 m. 6 sh. & index 1:63360

"For War Department purposes only."

P.R.O., W.O. 78/4557 index sheet only; described as "Printed".

There are a number of manuscript maps by the Royal Engineers in the Public Record Office, London, and the Public Archives of Canada, Ottawa.

NEW CARTOBIBLIOGRAPHY FROM CANADA'S NATIONAL MAP COLLECTION

Public Archives of Canada. National Map Collection.
County maps: land ownership maps of Canada in the 19th century =
Cartes de comtés: cartes foncières du Canada au XIXe siècle /
 compiled by Heather Maddick, with an introduction by Joan Winearls.
 Ottawa : Public Archives of Canada, National Map Collection, 1976.
 94p. Free: please request copies from the National Map Collection.
 ISBN 0-662-00108-7 [two Errata sheets inserted loose][18 illus. pp.]
 English and French text.

[Also available is an up-to-date "List of Publications of the National Map Collection". National Map Collection, Public Archives of Canada, 395 Wellington Street, Ottawa K1A 0N3, Canada.]

U.S. HISTORICAL COUNTY BOUNDARY DATA FILE AT THE NEWBERRY LIBRARY

Work has commenced on the compilation of a United States Historical County Boundary Data File. The goal is to create a machine-readable file of all the boundary changes of counties and other governmental and administrative units for the period 1790-1970. Used with a computer-directed plotter, the data file will make it possible to produce on demand maps of nearly any size, scale, and projection that cover any specified area (including interstate regions) at any given date from 1790 through 1970. The project now underway covers New Jersey and Pennsylvania and is designed to demonstrate the concepts, methods, and utility of compiling such a boundary data file for the entire nation. In addition to county, state, and international boundaries, the demonstration project will include all congressional districts, samples of state electoral districts and minor civil divisions, the locations of capitals and county seats, the areas of the spatial units, pertinent names, and the shoreline and major rivers of the two selected states.

The historical research will follow the traditional approach of searching statutes, official maps and surveyors' reports, court records, and other primary and secondary sources in order to establish a descriptive chronology of boundary changes from past to present. The cartographic compilation will commence with maps of the 1970 boundaries (i.e., the most accurate cartographic base); they will be amended through successive stages back to the pattern of 1790. The research and draft cartographic compilations will be executed at the Newberry Library, Chicago, under Project Supervisor John H. Long, formerly Assistant Editor of the Atlas of Early American History.

Cartographic compilation of the boundaries will be based upon the map series published by the U.S. Geological Survey @ 1:250,000 (1" = 4 mi.). The data file (based upon the DIME system developed by the U.S. Bureau of the Census) will be designed and tested and the cartographic data digitized at the University of Wisconsin Cartographic Laboratory, Madison, under the direction of Joel Morrison, Director of the Laboratory.

The Newberry Library is sponsoring the demonstration project, which is under the general direction of David Woodward, Program Director of the Newberry's Hermon Dunlap Smith Center for the History of Cartography. A grant from the National Endowment for the Humanities provides the financial support.

Interested persons--potential users of the data file, as well as those working in this area--are invited to address their inquiries to John H. Long, Newberry Library, 60 West Walton Street, Chicago, IL 60610.

DEFENSE MAPPING AGENCY ADMITS A LONG-STANDING ERROR

In its most recent Depository Program Newsletter, Frank Nicoletti, director of the Program, asked that mail be addressed properly when Members write to DMA, Washington, D.C.

He gave the address as "6500 Brookes Lane", with the following note: "Please note Brooks Lane is now Brookes Lane. Much to our chagrin we learned that it has always been Brookes and not Brooks; we mapmakers werent very observant."

CARTOGRAPHIC RESOURCES, PARTICULARLY FOR THE STUDY OF THE HISTORY OF
CARTOGRAPHY, AT THE UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA)

by

Norman J. W. Thrower
Professor of Geography
University of California-Los Angeles

Maps, atlases, globes, gazetteers and other cartographic resources at UCLA, although deposited more centrally than is true at some large campuses, are nevertheless found in a number of locations.

In 1960 the UCLA Map Library was formed from the general map collections of the Departments of Geography and Geology and the University Library and a Map Librarian appointed. At the time of the merger there were about 50,000 maps in the collection, a number of which has now risen to over 300,000 under the direction of Carlos Hagen, the Map Librarian. Mr. Hagen's philosophy is to build a cartographic information center, rather than merely a map library, and thus appropriate periodicals, books, indexes, etc. are kept in proximity to the largely post-1900 collection in Bunche Hall on the Westwood campus.

The greater part of the UCLA Map Library is in the basement of Bunche Hall (A253) where contemporary flat sheets, folded maps, plans, globes, gazetteers and reference materials are housed. Working spaces, including light tables and other equipment are provided for readers. Hours are from 10 a.m. to 3 p.m., weekdays; most maps are circulated.

A very large collection of modern atlases, as well as facsimiles of historical maps and some old maps are housed in the UCLA Map Library Annex in Powell Library, Room 34. Early materials in the Annex include sheets from the Wilkes hydrographic surveys of the seas bordering Antarctica, and the Wheeler, Powell and Hayden surveys of the western United States -- all from the nineteenth century. The hours are from 3 to 6 p.m. on Monday, Wednesday and Friday.

Most of the historical maps at UCLA are kept in Special Collections in the Research Library. These consist both of collections and individual acquisitions. In the former category are the Warren Shearman Collection of Renaissance maps and atlases, the Sir Maurice Holmes Collection of Cookiana and the Lord Stuart de Rothesay Collection of eighteenth and early nineteenth century maps. Individual items of note include: The Ptolemy *Geographia* published in Venice of 1511, which is the first published atlas to use color printing (this was UCLA's 3,000,000th book acquisition); a fine hand colored copy of Ortelius' *Theatrum Orbis Terrarum* of 1579, the first from the renowned Plantin Press; Brown and Hogenberg's *Civitatis Orbis Terrarum* 1572-1618; the four volume, *English Atlas* of Moses Pitt, 1680-3; Captain James Cook's first published map -- of Gaspé Bay in the Gulf of St. Lawrence, 1759? All major European schools of cartography are represented in the collections. Among non-European materials there is a splendid collection of printed Japanese maps from the seventeenth to the nineteenth centuries, and an early manuscript map of Korea. UCLA possesses the only set of Prince Yussuf Kamal's unsurpassed facsimile atlas, *Monumenta Cartographica Africae et Aegypti* in western

North America, and one of only two sets at a university on this continent. There is also an extensive collection of early maps relating to California and the West. Hours are from 9 a.m. to 5 p.m. Monday through Saturday.

A collection of atlases, map library indexes, gazetteers, carto-bibliographies, etc. is kept in the Reference Division of the Research Library. These open-shelf materials are available to readers during all hours when the Library is open. UCLA's Department of Geography has a working collection of atlases in its own library, a separately housed collection of wall maps for instructional use, the recently acquired Spence and Fairchild Air Photo Collections, and hand painted glass map slides in the Harold Fairbanks, J. Paul Goode and Burton Holmes Collections. A collection of geological and topographical quadrangles, complete for California, is housed in the William Putnam Library of the Geology Library.

UCLA's William Andrews Clark Memorial Library on Cimarron Street at West Adams Boulevard near downtown Los Angeles contains map and atlas resources appropriate to its seventeenth and eighteenth century English cultural focus. These include: Daniel Defoe's, *Atlas Maritimus and Commercialis* (with scientific explications by Edmond Halley); a Dutch edition of Halley's World Isogonic Chart; a copy of Ogilby's *Britannia*; a remarkably complete collection of 'Distance Maps' of England and Wales by John Adams and his *Index Villarum*, etc.

A number of the above resources have been the subject of articles by the present writer in the *UCLA Librarian*:

"Monumenta Cartographica Africae et Aegypti", Supplement to No. 15, Vol. 16, May, 1963, pp. 121-126 (7 illustrations).

"The Shearman Collection", Supplement to No. 6, Vol. 19, June, 1966, pp. 61-66 (5 illustrations).

"The English Atlas of Moses Pitt", Vol. 20, No. 1, Jan., 1967, pp. 1-3 (2 illustrations).

"Seventeenth Century Distance Maps by John Adams", No. 6, Vol. 25, June, 1972, pp. 23-25 (1 illustration).

"Defoe and the 'Atlas Maritimus'", (co-author with Maximilian E. Novak) No. 6, Vol. 26, June, 1973, pp. 32-33.

Issued by the Clark Library is "Edmond Halley and Thematic Geo-Cartography" in *The Terraqueous Globe: The History of Geography and Cartography*, Los Angeles, 1967, pp. 1-43, (5 illustrations).

Separately issued by the UCLA Library is an essay, *Captain James Cook and His Voyages of Discovery in the Pacific*, 12 pages, illustrated.

"Dong Kook Yu Ji Do: A Recently Discovered Manuscript Map of Korea", co-author with Young Il Kim, *Imago Mundi*, Vol. XXI, 1967, pp. 30-49 (11 pages of illustrations), is a journal article on a UCLA Special Collections item.

Much of the inspiration and many of the illustrations for my *Maps and Man: An Examination of Cartography in Relation to Culture and Civilization*, Prentice-Hall, 1972, updated and reprinted, 1975, vii, 184 pp. (70 illus.) were drawn from the UCLA map collections.

In 1972-3 cartography was specially emphasized at the Clark Library when I was Clark Library Professor. As part of my duties I am editing six essays originally given as seminars on the history of cartography during, or prior to, that period as *The Compleat Plattmaker: Chart Map and Globe Making in England in the Seventeenth and Eighteenth Centuries*, University of California Press, Berkeley and Los Angeles, 1976? The six essays included are by: Jeanette D. Black, Thomas R. Smith, Norman J. W. Thrower, Coolie Verner, Helen M. Wallis, and David A. Woodward.

CARTOGRAPHIC CONFERENCES [continued on p. 66]

(Some citations courtesy National Cartographic Information Center Newsletter, Winter/Spring 1976 [No. 4] N. B. Faries, Editor)

XIII International Congress for Photogrammetry / Helsinki, Finland - July 11-23

XXIII International Geographical Congress and VII International Cartographic Association Conference / Moscow, USSR - July 28—August 10

International Cartographic Association VIII Technical Conference and V General Assembly / Moscow, USSR - August 3-10

International Geological Congress / Sydney, Australia - August 16-25

Western Association of Map Libraries, Fall Meeting / Eugene-Corvallis, Oregon - September 23-24-25

American Society of Photogrammetry and American Congress on Surveying & Mapping, Fall Technical Meeting / Seattle, Washington - September 28/October 1

International Geodetic Symposium on Satellite Doppler Positioning / New Mexico State University, Las Cruces, New Mexico - October 12-14

The National Council for Geographic Education will hold its annual meeting in San Francisco on November 24-27. The meeting will be held at the San Francisco Hilton Hotel and incorporate a theme dealing with the twin bicentennial of San Francisco and the United States as well as a look into the next 200 years. For further information contact: William H. Wake, Chairperson; NCGE Annual Meeting 1976; Department of Earth Science; California State College; Bakersfield, CA 93309.

Seventh International Conference on The History of Cartography / August 7-11, 1977. Washington, D.C. Organizing Committee, c/o Library of Congress, Geography & Map Division, 845 South Pickett St., Alexandria, VA 22304. First Circular is out, if you are interested, send for forthcoming Second Circular.

Joint sponsorship: Library of Congress, Geography & Map Division
The Folger Shakespeare Library
National Archives, Cartographic Archives Div.
Smithsonian Institution, National Museum of
History and Technology

Papers based on original research in any aspect of cartographical history will be considered for possible presentation in one of the technical sessions Aug. 8-9-10. Technical Program Committee (address above) by July 31, 1976 will consider proposed papers - send title & 300 word abstract by deadline given above, for consideration.

THE DAKIN PUBLISHING COMPANY AND ITS FIRE INSURANCE MAPS

by

R. Philip Hoehn
Map Librarian
The Bancroft Library
University of California, Berkeley

The production of fire insurance plans of North American cities was dominated by two companies, the Sanborn Map Company of New York and the Charles E. Goad Company of London. Although these two giants have been discussed in the literature,¹⁻² the stories of other publishers, for the most part, have not been adequately told. The West, which for the purposes of this paper will include Hawaii, had a number of individuals and institutions which produced insurance plans. One of the more successful of them was the Dakin Publishing Company of San Francisco. Dakin was in existence from about 1885 until the early 1960's, and actively produced insurance maps from its beginning until the second decade of the 20th Century.

Western Insurance Mapping

The history of insurance mapping in the West has been only marginally treated in published articles. Before a complete history can be written, however, two things must be compiled. First, a census of the fire insurance plans themselves, and second, the histories of the organizations and individuals involved in producing these maps. Research in the field has been hampered by the generally poor bibliographical control of cartographic materials. It is also impeded by the effects of a great natural disaster, the San Francisco earthquake and fire. The West's insurance industry was heavily concentrated in San Francisco during the 19th and early 20th Centuries. Most insurance companies and the industry's boards and associations were headquartered, or had regional offices, there. These organizations, as well as most San Francisco libraries, including that of the Fire Underwriters' Association of the Pacific, the second largest insurance library in the U.S., were destroyed in 1906. Along with these institutions went many of the maps and other documents which would have helped us to reconstruct the events of the past. Lacking a great deal of the pre-1906 evidence, we are able to put together only a tentative history of western insurance mapping.

The first insurance map of a city in the West was published in 1861 by Casper T. Hopkins for the San Francisco Board of Fire Underwriters. It was entitled an Insurance Survey of All Buildings in the Central Blocks of San Francisco. Fifty copies of this multi-sheet color lithograph were published, but none is currently known to exist. The map was copyrighted, but deposit in the Library of Congress, unfortunately, was not required at the time of its publication.³⁻⁵

Possibly the second insurance map of a western city was an 1875 map of San Francisco produced by D. A. Sanborn. No copies of this four volume work are known to have survived, but the New York Public Library has a copy of volume two, corrected to 1885. The Bancroft Library has an 1877 index map to these volumes, but not the maps themselves.

Another early map is a six sheet map of Honolulu, published in 1879 by the Lion Insurance Company of London. It is preserved in the Hawaii State Archives. Other insurance plans were no doubt published during this early period, and large numbers of maps in manuscript form were certainly made.

Henry J. Morrison, a member of the insurance fraternity, stated in 1916, "On this Coast, various companies have in the past made maps--Dean, Perris and Dakin among others."⁶ Nothing is known about the maps of Dean. There are no recorded copies of Perris maps of the West Coast, but they must have been produced after the 1861 Hopkins map, and not later than 1899 when the firm of Perris and Browne was merged into the Sanborn-Perris Map Company.⁷

The early 1880's saw the rapid proliferation of insurance maps of the West. By 1884, for example, Sanborn plans existed for at least 24 medium-sized California cities.⁸ Later, in the early 20th century, the Fire Underwriters' Inspection Bureau of the Pacific Coast, prepared many insurance maps of western cities.⁹

In addition to fire insurance plans, closely related "real estate maps" were also published, probably by a number of companies. These maps served some of the same functions of fire insurance maps, but were at a smaller scale, and had greatly generalized building construction information. For example, the Los Angeles atlases produced by George W. Baist are at a scale of 1:3,000, with the downtown area at 1:1,200. The Baist atlases classed buildings only by type of building material used: brick, frame or stone. No windows, doors, chimneys, elevators, number of stories and other traditional insurance map information is provided. Baist produced atlases of Los Angeles in 1905, 1910, 1914, 1921 and 1923, and for Seattle in 1905, 1908, and 1912.

History of the Dakin Publishing Company

The Dakin Publishing Company was founded about 1885 by Edward Amos Dakin.¹⁰ Dakin was born in New London, Connecticut on February 19, 1847. Nothing is known of his parents; their names are omitted from his death certificate.¹¹ Dakin's birth certificate and information about his Connecticut background could not be found either by local government agencies or by the New London County Historical Society.¹² Dakin served in the Union forces during the Civil War and sometime thereafter, probably in 1877, came to San Francisco.¹³ He was a member of the Lincoln Post No. 1 of the Grand Army of the Republic.¹⁴

According to city directories, Dakin in 1878 was an agent for the Electric Pen and Press, and from 1879 to 1884, an agent for Edison's Electric Pen and Press, and a manufacturer of Multiplex copying tablets. From 1885 to 1892, he was a partner with G. H. Hawes in a firm engaged in stenography, typewriting and copying. From 1887, when the Dakin Publishing Company first appeared in city directories, until 1892, both the Dakin Publishing Company, with Dakin as manager, and the firm of Dakin & Hawes were listed. Both firms were at the same address, 320 Sansome Street. The relationship of these two apparently separate firms is not clear.

The Dakin Publishing Company was never exclusively concerned with the production of fire insurance plans. Other kinds of maps and additional services were always carried on by the firm. In the 1888 city directory the company is listed as electric pen writers, and in later years, lithographers and

electric printers. In 1897 Dakin listed its interests as mining maps and reports, lithographing, draughting and blue printing.¹⁵ In 1913, the activities of the firm were electric pen printing, draughting, zincos, blue prints, maps, plans, printing and lithographing.¹⁶ In 1924, an obituary cited Dakin as "one of the foremost publishers of maritime maps in the world."¹⁷ No evidence, aside from this statement, has been found to support the contention that Dakin published "maritime maps." We must therefore assume that the obituary was in error, and that perhaps "mining maps" was the term intended. By 1934, the Dakin Publishing Company apparently was no longer engaged in map making; city directories list its services as mimeographing, multigraphing and direct mail services, and from 1958 onward, as a letter shop.

A large number of maps other than insurance plans were issued by the company. A few examples will serve to illustrate the variety of maps produced. Some of these were published by Dakin, and others were only printed or lithographed by Dakin for other publishers.

- 1888 [Maps of Assembly Districts showing] election precincts, City and County of San Francisco. Scale not given. 17 sheets 54x68cm. or smaller, ea. (Bancroft Library)
- 1888 Carnall (N.C.) and Company. Map of Palo Alto, the town of Leland Stanford Junior University. 1:2,400. col. map on sheet 94x64cm. (Bancroft Library)
- 1888 Martin, Charles D. Official map of the County of Merced ... 1:79,200. col. map 131x143cm. (Bancroft Library)
- 1889 I Street Improvement Company. Fresno city business and residence property at auction. Scale not given. 44x56cm. (Bancroft Library)
- 1890 San Francisco. Board of Supervisors. Map of a portion of San Francisco, Cal. showing fire limits. Scale not given. 34x23cm. (In: Coast Review, v.41(1891)front.) (Bancroft Library)
- 1896 California. State Development Committee. Map of the State of California. 1:1,800,000. col. map 26x20" (Bancroft Library)
- 1903? Land of the Oroville Gold Dredging and Exploration Company [Butte County, Calif.] 1:6,000. 3 col. sheets. (Bancroft Library)
- 1904 Turlock Irrigation District. Map of the Turlock Irrigation District, Stanislaus and Merced Counties, California. 1:24,000. 4 sheets. (California State Library, California Section)

The 1906 earthquake and fire interrupted the firm's operations. Prior to this the firm was in San Francisco's financial district, but from 1906 to 1910, Edward Dakin is listed in city directories as a publisher at his home address, 1656 Taylor St. The Dakin house on Russian Hill was one of the few in the area to escape the fire.¹⁸ From 1911 onward, the company was again located in the financial district.

Mr. Dakin died of natural causes in his home on April 11, 1925, at the age of 78.¹⁹ He left his entire estate, described as follows, to his wife, Mary E. Dakin:²⁰

CREDITS

The Dakin Publishing Company:	Assets	\$ 500.
	Plant & Equipment	350.
	Stock in Trade	400.
	Accounts Receivable	2,058.61
Receipts from Business:		\$9,034.39

DEBTS

Debts, including funeral expenses, claims of creditors and expenses of running business:	\$10,002.17
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Mrs. Dakin was born on September 21, 1856 in Brooklyn, New York. Her parents were Martin Gurrell and Hannah White, who were also born in New York State. Mrs. Dakin came to California about 1868.²¹ We do not know if she ever took an active part in the affairs of the Company, although she is listed in city directories as a co-owner of the Company with Henry A. Perry from 1926-1938. At the time of her death, she was a 40% owner of the Company, her share being valued at \$750.²² Mrs. Dakin was partially paralyzed, unable to articulate and confined to bed in December 1936.²³ She died in San Francisco on March 4, 1938 and left no heirs.²⁴

The Company was operated after Mrs. Dakin's death by Henry A. Perry, and later by his widow, Mrs. Allaan M. Perry. The company ceased to exist in the early 1960's.

Dakin Insurance Plans

Unfortunately no catalog or other listing of the insurance plans of the Dakin Publishing Company has been discovered. Since no census has been compiled, the following tentative, and no doubt far from complete one, is presented:

British Columbia

Vancouver. 1889. 20 sheets. 1:600.

Locations: Photographic Archives Div., Vancouver Public Library; photocopies in Vancouver City Archives, Univ. of British Columbia, and Simon Fraser University.

California

[California Warehouse Book, containing insurance plans of warehouses and adjacent areas of California cities] 1885-corrected to 1897?
181 sheets. 1:600. Covers portions of 349 communities.
Location: Bancroft Library.

Benicia. 1893. 8 sheets.

Location: California State Library.

Chico. 1885. 11 sheets. 1:600.

Location: Bancroft Library.

Monterey. 1886. 2 sheets.

Location: California State Library.

Pomona. 1894. 10 sheets.
Location: Pomona Public Library.

Santa Cruz. 1888? 15? sheets. Has correction slips. 1:600.
Location: University of California, Santa Cruz (sheets 2-5 only).

Hawaii

Honolulu. 1885. 13 sheets.
Location: Hawaii State Archives.

Honolulu. 1891-corrected to 1899. 13 sheets.
Location: Hawaii State Archives.

Kamehameha Schools, Kalihi, Honolulu. 1912. 1 sheet.
Location: Hawaii State Archives.

Montana

Butte City. 1887. 14 sheets.
Location: Huntington Library.

Washington

Spokane. [Between 1885 and 1889].
Location: Formerly in the Library of the Fire Underwriters' Association of the Pacific, San Francisco. Destroyed in 1906 earthquake and fire.²⁵

In addition to the twelve maps listed above, which are now or were at one time held by libraries, we also know that there was a Dakin plan of at least a portion of San Francisco made in 1888.²⁶ This map, or book of maps, was the subject of a lawsuit brought by Sanborn against Dakin for copyright infringement. The Sanborn Map and Publishing Company charged that one of its copyrighted maps had been sold to an insurance agency, Hutchinson & Mann. Hutchinson and Mann made some corrections on it, and then procured the Dakin Publishing Company to resurvey and make further corrections of portions of it. Dakin was charged with making these corrections by putting on pasters or correction slips, and with reproducing portions of the map not changed by pasters. Sanborn charged that in some instances almost an entire sheet was reproduced by Dakin. On sheets containing extensive corrections, Dakin produced new sheets, relithographed them, and produced multiple copies and no doubt, charged Sanborn, sold these copies to other companies having Sanborn's maps. The Circuit Court of the Northern District of California in 1889 ruled that Dakin was indeed guilty of the charge and issued an interlocutory decree enjoining further infringements and ordering an accounting for the maps already sold by Dakin.²⁷

Dakin also produced an unknown number of additional insurance maps of cities in the Northwest. The Coast Review for November 1887 reported, "Mr. Harrison, of the Dakin Map Publishing Company ... has been ... making new diagrams [i.e., insurance plans] of important points in eastern Washington and Idaho."²⁸

To further document the relative scarcity of Dakin maps, the following

list of some of the libraries which do not hold Dakin maps is presented. All have large collections of western cartographic materials. Included in their number are the two largest repositories of fire insurance maps in the United States.

California Historical Society
 California State University, Northridge
 Honnold Library of the Claremont Colleges
 Library of Congress
 Nevada Historical Society
 Oregon Historical Society
 University of Idaho Library
 University of Washington Libraries

No Dakin maps are listed in the National Union Catalog, which contains no entries at all for the Dakin Publishing Company.

In the face of this scanty evidence, it is risky to reach any conclusions about the extent of insurance mapping by Dakin, either in terms of time periods or in terms of geographical areas covered. The time frame is perhaps easiest to deal with. We do know that the earliest known plan is dated 1885. Although it is possible that Dakin or Dakin & Hawes issued maps before this date, we have no evidence to suggest it. 1912 is the latest recorded for a Dakin insurance map, and Morrison's 1916 statement, that Dakin maps were produced in the past, would seem to confirm that Dakin ceased making insurance plans sometime between these two dates.

In terms of geographical areas covered, we know that Dakin published maps of cities in British Columbia, California, Hawaii, Idaho, Montana, and Washington. It seems very likely that Dakin also issued maps for cities in other western states and territories, including Arizona, Nevada and Oregon, and possibly Alaska, Colorado, New Mexico, Utah and Wyoming. These areas were all under the jurisdiction of the Pacific Insurance Union and its successors. Many of the companies which might have purchased maps from Dakin operated throughout the West. Certainly it would seem to be safe to assume that since both California and Washington cities were mapped, cities in Oregon would also have been mapped by Dakin surveyors. And since a city as far away as Honolulu was mapped, why not places closer to San Francisco, such as cities in Nevada and Arizona? Until a more complete record of Dakin maps can be compiled, however, this is mere speculation.

The appearance of Dakin maps is very similar to the Sanborn maps of the period. Conventional symbols and coloration are used. These were apparently so standardized that Dakin did not feel it was necessary to include a legend on its maps. This at least is true for the two Dakin plans in the Bancroft Library. The quality of lithography in these two examples is not quite as good as that of the Sanborn maps. The lines and lettering are often gray and somewhat uneven rather than solidly black. The hand coloring is rather pale, although time may be responsible for this latter condition. On the whole, Dakins seem to have been quite satisfactory products, as the following testimonial, printed on the map of Chico indicates: "We the undersigned [Chico insurance agents], have carefully examined the new map of Chico, surveyed by the Dakin Publishing Company, and find it the best and most complete map of our town, with considerable number of additional sheets attached, and recommend its use for Chico...." Unlike Sanborn maps, the Dakin plans do not always, and perhaps never, have the Dakin name printed on the sheets themselves.

Rather the name appears on the cover, and is occasionally stamped on the sheets in red ink. The red stamps are in two forms, one in a block surrounded by double lines stating, "This map is the property of Dakin Publishing Company. Loaned to the local agent for his exclusive use", and the other, in large block letters stating, "Dakin Publishing Co." This stamped-on information is found on the maps of Chico and Santa Cruz. The California Warehouse Book, which may not be in its original cover, has no identifying marks by Dakin, but is so attributed because of a manuscript note added by the insurance company which purchased or leased it. Because of the fact that Dakins might not always be easily recognizable, it is possible that some maps identified as Sanborns are in fact Dakins (or perhaps the products of some other firm).

There is some evidence to suggest that Dakin did not duplicate, and therefore did not attempt to compete directly with Sanborn in the production of fire insurance plans. Since the field of insurance mapping is such a specialized one with a limited market, this would probably have been a highly unsuccessful endeavor. Insofar as California insurance plans are concerned, the following table seems to indicate that Dakin's role was to provide mapping of cities for which Sanborn maps had become outdated:

<u>City</u>	<u>Sanborn Map</u>	<u>Dakin Map</u>
Benicia	1886	
	1891	
	1899	1893
Chico	1884	
	1886	1885
Monterey	1885	
	1888	1886
Pomona	1885	
	1887	
	1888	
	1895	1894
Santa Cruz	1886	
	1888	1888?
	1892	

These Dakin updatings were probably requested by one or more insurance companies, which may have been unable to persuade Sanborn to provide a revision and did not want to go to the expense of updating the maps themselves.

The California Warehouse Book covers many small communities never mapped by Sanborn. It was also a convenient assemblage not duplicated by Sanborn, although Sanborn did produce volumes of maps of Whiskey warehouses in the eastern states.

It is possible that for some cities, Dakin may not have issued a completely new map, but only a few revised sheets for inclusion in Sanborn volumes.

This was apparently the intention of Dakin in the San Francisco copyright case mentioned above. Perhaps some Sanborn maps now found in libraries contain sheets revised by Dakin. There is no additional evidence to support this contention, but it seems a likely possibility.

Conclusion

The Dakin Publishing Company produced insurance plans over a period of some twenty-seven years. It published a larger number of plans than the twelve currently known. We do not know whether there were only a handful of additional maps or whether there were hundreds. Dakin was able to compete, with some degree of success, against the much larger and more prolific Sanborn and Goad companies. By 1916, however, Sanborn had solidified its domination of the U.S. field by buying up its competitors, or by driving them into other business endeavors.²⁹ Dakin, no exception to this nationwide trend, withdrew from the production of insurance plans. The firm was perhaps more fortunate than others, since it had never relied solely on the production of insurance plans for its income. Dakin probably found it relatively easy to concentrate on other activities.

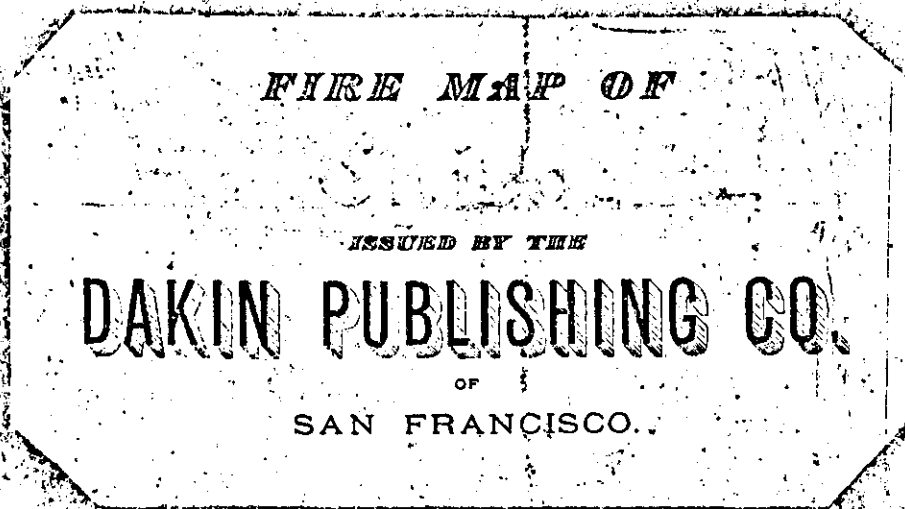
It is hoped that this article will spur map librarians and others to seek out additional Dakin insurance plans and to make their existence known. It is only in this way that we will be able to obtain a clearer and more complete picture of the activities of Dakin and its relative importance in the insurance mapping field.

Notes

1. Ristow, Walter W. "United States Fire Insurance and Underwriters Maps, 1852-1968", Library of Congress, Quarterly Journal, 25(1968)194-218.
2. Hayward, Robert J. "Chas. E. Goad and Fire Insurance Cartography", Association of Canadian Map Libraries, Proceedings of the 8th Annual Conference (1974)50-72.
3. "Relic of Old Times in San Francisco", Coast Review 52(1897)413-4.
4. Greenwood, Robert. California Imprints, 1833-1862, a Bibliography. Los Gatos, Calif., Talisman Press, 1961, p.500, item 236.
5. MacPhail, Archibald. Of Men and Fire: a Story of Fire Insurance in the Far West. San Francisco, Fire Underwriters' Association of the Pacific, 1948, p.118.
6. Morrison, Henry J. "A Modern Map System", Fire Underwriters' Association of the Pacific, Proceedings, 40(1916)124-4.
7. Ristow, op. cit., 198-200, 202.
8. Rees, Gary W. and Mary Hoerber. Catalogue of Sanborn Atlases at California State University, Northridge. [Santa Cruz, Calif., 1973] (Western Association of Map Libraries Occasional Paper no. 1), pp.5-39.
9. Ristow, op. cit., 203.

10. San Francisco. Great Registers. These are the only source discovered by the writer which give Dakin's middle name; other records provide his middle initial only.
11. California. Bureau of Vital Statistics. Standard Certificate of Death, Edward A. Dakin. San Francisco, 1925. (San Francisco Dept. of Public Health, local registered no.2276).
12. Knox, Elizabeth B. Letter to author, June 11, 1975. It states that the City Clerk had no records of Dakin. Mrs. Knox searched city directories, cemetery inscriptions, newspapers and other sources without success. She further stated that Dakin was not a New London name.
13. "Veteran Map Publisher Dead", American Printer, 80:9(May 5, 1925)62.
14. San Francisco Chronicle, (Apr 12 1925)10c [Obituary].
15. Washburn, George E. Official Map of Mariposa County, California. San Francisco, Dakin Publishing Co., 1897.
16. Dakin, Edward A. [Will] San Francisco, Feb. 26, 1913. (San Francisco Records Center, Probate File no.41541).
17. "Veteran Map Publisher Dean", op. cit.
18. Ibid.
19. California. Bureau of Vital Statistics. Standard Certificate of Death, Edward A. Dakin, op. cit. Cause of death was cirrhosis of the liver, complicated by arteriosclerosis. His body was cremated at Cypress Lawn Crematory on April 13.
20. Final Account and Petition for Distribution, In the Matter of the Estate of Edward A. Dakin. San Francisco, filed Dec. 4, 1925. (San Francisco Records Center, Probate File no.41541).
21. California. Bureau of Vital Statistics. Standard Certificate of Death, Mary E. Dakin. San Francisco, 1938. (San Francisco Dept. of Public Health, local registered no.1635).
22. In the Matter of the Guardianship of the Person and Estate of Mary E. Dakin, an Incompetent Person. San Francisco, filed Mar. 24, 1938. (San Francisco Records Center, Probate File no.75472).
23. Fife, Joseph. Affidavit of Dr. Joseph Fife. San Francisco, filed May 6, 1937. (San Francisco Records Center, Probate File no.75472).
24. California. Bureau of Vital Statistics. Standard Certificate of Death, Mary E. Dakin, op. cit. She died of cerebral apoplexy complicated by myocarditis and arteriosclerosis. Her body was cremated at Cypress Lawn Crematory on March 5th.
25. "Insurance maps", Fire Underwriters' Association of the Pacific, Proceedings, 17(1893)7-8.

26. Coast Review, 23(1888)466 and 37(1889)573.
27. *Sanborn Map & Publishing Co. v. Dakin Publishing Co.* 39 F. 266
(C.C.N.D. Cal. 1889).
28. "Notes from the Northwest", Coast Review 22(1887)817.
29. Ristow, op. cit., 206.



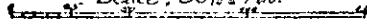
Illus. No. 1

Cover title of 1885 Chico map.
Courtesy The Bancroft Library.

CHICO,

Cal.

Scale, 50 ft. = 1 in.



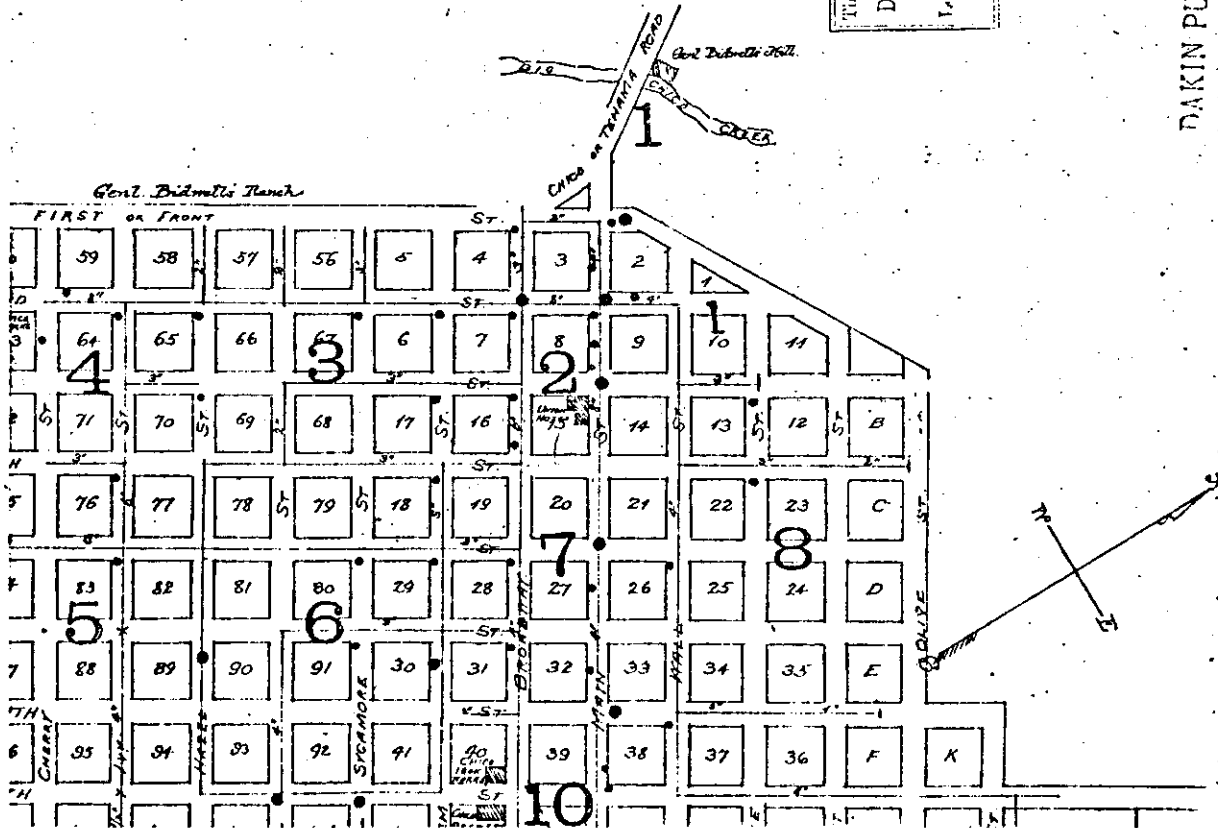
We, the undersigned, have carefully examined the New Map of Chico, surveyed by the Dakin Publishing Company, and find it the best and most complete map of our town, with considerable number of additional streets attached, and recommend its use for Chico.

Chico, Cal.,
July 10, 1885.

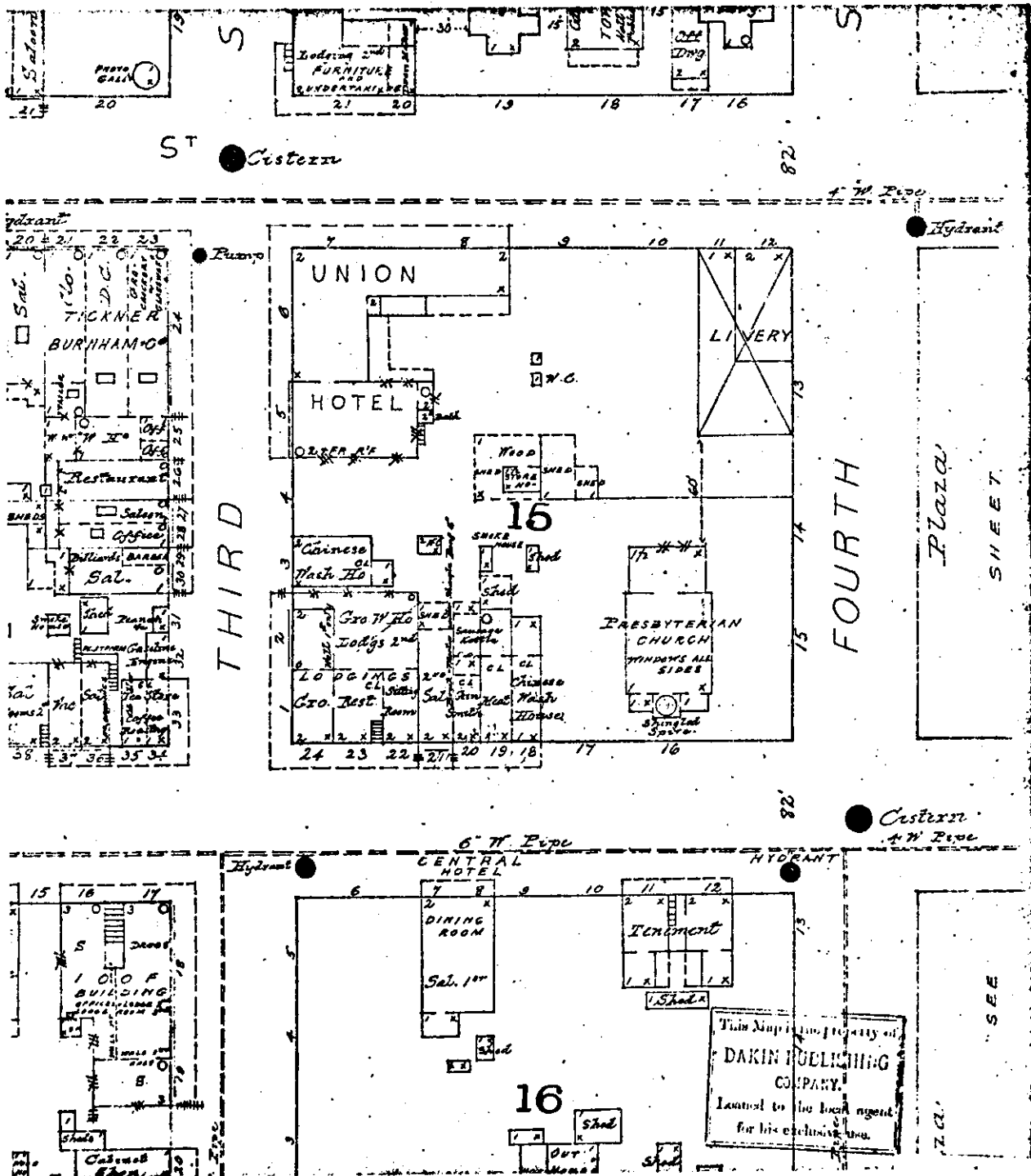
A. L. Thiel, Insurance Agent }
J. M. Hooper, " " }
S. Blum & Co., " " }

This Map is the property of
**DAKIN PUBLISHING
COMPANY.**
Lent to the local agent
for exclusive use.

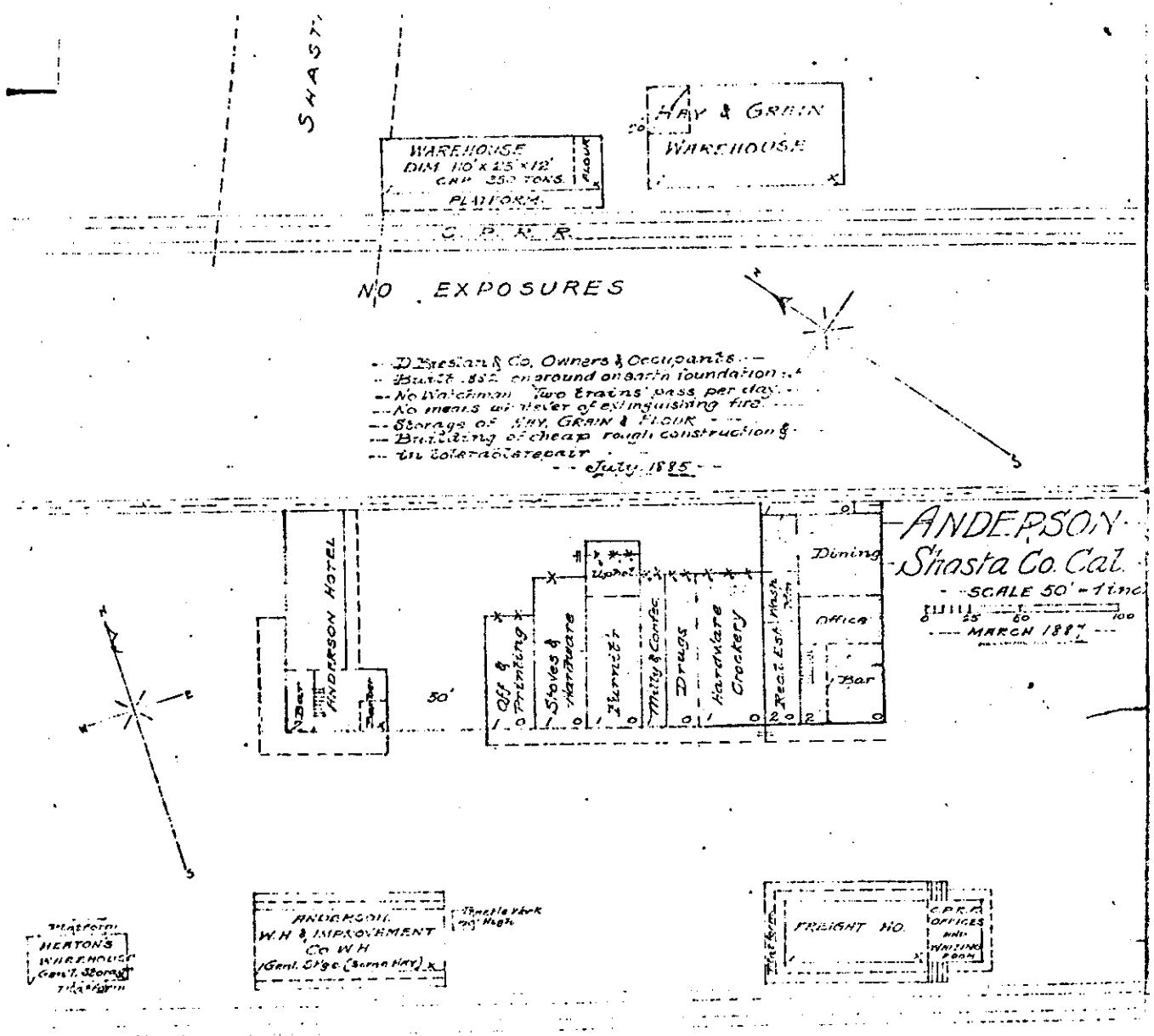
DAKIN PUBLISHING CO.



Illus. No. 2
Portion of sheet of Chico, 1885, showing the red stamps.
Courtesy The Bancroft Library.



Illus. No. 3
 Portion of a sheet of Chico, 1885.
 Courtesy The Bancroft Library.



Illus. No. 4
 Portion of a sheet from California Warehouse Book.
 Courtesy The Bancroft Library.

CALIFORNIA STATE LIBRARY
CALIFORNIA SECTION MAP COLLECTION

Wesley Catlin

Librarian, California Section, California State Library

The map collection at the California State Library is divided between the Government Publications Section and the California Section. Since my primary familiarity is with our California maps, this paper is devoted to that collection. Although the chronological aspect of the division includes some overlapping, the division is made by place and date. Specifically the California Section map collection includes the states of California and Nevada before 1900.

This emphasis on early maps is a natural result of, and a complement to, our extensive indexing of newspapers, periodicals, and books relating to the early history of California. Maps of Nevada, though small in number, are included because that state's early development was influenced by mining interests from California.

The maps in the collection are arranged geographically and then by call number and date. This call number consists of the Dewey classification number for California or Nevada (state) followed by a Cutter number indicating general California or specific county coverage. To this Cutter number is added a letter indicating a cartographer, surveyor, or map publisher. Below is placed the year published or, occasionally, the time period depicted on the map. Within the cataloging process additional entries are made for cities, subjects, cartographers, surveyors and publishers.

A patron desiring to copy maps may employ our Photo Services Section to make photostatic prints. Maps are copied at the same size as the original and may require one or more sheets to complete, depending on the size of the map. Our largest photostatic sheet size is 18 x 24 inches.

Photocopying of maps by the public on our public machines is limited to those maps less than nine by thirteen inches. Since the map room is not open to the public, paging for room use is provided by the California Section clerical staff. Use of the collection is available only at the State Library.

Map preservation is an on-going policy of the California section. The State Library Repair Section handles most of our preservation work except for photostating and for lamination. The latter is a service provided by the California State Archives, also here in Sacramento.

Since our "new" maps are at least seventy-five years old, backing a map with muslin is considered the minimum preservation effort. More commonly, after backing a map with muslin, it will then be placed in an envelope with a kraft paper back and a clear plastic front, and the edges then

taped. This method does provide protection from mechanical wear during the handling of maps by staff and patrons. In addition, these maps are photostated by our Photo Services Section. Negative photostatic prints are pagged for patron use unless the original is specifically requested.

Lamination is at present our highest form of preservation. The map is first placed in a bath to remove the acids which cause paper to deteriorate and is then laminated in Cellulose acetate film.

The number of maps that we have laminated is less than two dozen, and these have generally been small and in deteriorating condition. A limiting factor in the use of this process has been its cost.

Some time ago I was told by a member of WAML that his clientele was interested only in current maps. Further, he did not see much reason for keeping old maps. Thus, in defense of "old" maps, here are examples of uses of our collection: a title insurance company was able to prove a "complete chain of non-existence" of a Sacramento River island that its claimed owner insisted was in existence from statehood. Bottle collectors, prospectors and seekers of buried treasure scrutinize old maps for locations of dwellings, refuse dumps, mining activities, old roads, and stage stops. Genealogists peruse maps hoping to find land ownership listings or locate place names where ancestors have lived. Finally, in situations where environmental impact reports are required, our maps are used to discover early land use. Our 1850 map by Cadwalder Ringgold, for instance, shows Indian villages and agriculture along the Sacramento river.

AERIAL PHOTOGRAPHY SUMMARY RECORDS SYSTEM

A new computer based system containing data on available aerial photography was the subject of a workshop January 27, 1976 at the U.S. Geological Survey in Menlo Park. The system, developed by the National Cartographic Information Center, is called the Aerial Photography Summary Records System, or APSRS for short. It has been designed to store, search and retrieve data concerning planned and existing aerial photography of the United States. Users will be able to determine which agency holds the negatives and how to order prints. It is not a union list of holdings of contact prints. The long-range goal is to include photography held by all federal, state and local agencies. However, at present, the system contains data input by U.S.G.S., U.S.D.A., NASA, and DMA. Records are accessible by aerial coverage, based on either topographic quadrangle names, or state/county names, or quadrilateral longitude and latitude. It is anticipated that APSRS will save government agencies, at all levels, several million dollars now spent on reflying aerial photography already in existence, but unknown to users. The system can be queried on-line by calling USGS in Menlo Park (415) 323-8111, ext. 2135. At present there is no charge.

Janet Rudd
Map Librarian, UC Berkeley

[Slightly revised version, from *CU NEWS* (UC Berkeley, University Library)
Vol. 31, No. 9, 4 March 1976, p. 5.]

DUPLICATE SANBORNS AVAILABLE

We are pleased to announce the availability of duplicate maps, published by the Sanborn Map Company, at the E.S. Bird Library, Syracuse University. Kathy Patten, Geography Bibliographer, has made this list available exclusively to the Information Bulletin, and agreed that (since Syracuse has no Sanborns) it is important that these go to other collections where they would be most appropriate as a complement to the receiving institution's holdings.

Requests should be addressed to Kathy Patten, Geography Bibliographer, E.S. Bird Library/Area Studies, Syracuse University, Syracuse, NY 13210.

State	Sheet Name	Date	Sheet Holdings	
Alabama	Gainesville	1909	1	
California	to CU-A - David	1911	1-5	
	to CU-B {	French Gulch	1912	1
		Madera	1912	1-18
		Petaluma	1910	1-31
	to CU-A - Winters	1911	1-5	
Colorado	Coal Creek	1912	1	
	Florence	1912	1-6	
Connecticut	New London	1912	1-43	
Deleware	to PP - Delmar	1911	1-7	
Florida	Fort Lauderdale	1912	1-4	
Georgia	Dallas	1911	1-4	
Idaho	Kendrick	1909	1-2	
Illinois	Danvers	1910	1-2	
	Dundee	1912	1-8	
	Libertyville	1912	1-5	
	McHenry	1912	1-5	
	Mattoon	1909	1-9	
	Nokomis	1912	1-5	
	Pekin	1909	1-20	
	Warren	1912	1-4	
Indiana	Farmland	1911	1-3	
	Vernon	1911	1-2	
Kansas	Conway Springs	1911	1-3	
	Iola	1912	1-25	
	Scammon	1912	1-9	
Louisiana	Plaquemine	1912	1-15	

1912 to
1910 to
1911 to

Maine	Damariscotta	1912	1-4
	Mill Bridge	1912	1-3
	Old Town	1912	1-10
	Orono	1912	1-6
	Waldoboro	1912	1-7
	Wiscasset	1910	1-2
Massachusetts	Barre	1911	1-10
	Hyannis	1912	1-7
	Uxbridge	1909	1-11
	Walpole	1911	1-5
Michigan	Blissfield	1912	1-3
	Charlevoix	1912	1-11
	Dearborn	1912	1-2
	Mt. Pleasant	1910	1-13
	Newaygo	1911	1-2
	White Cloud	1911	1-2
Minnesota	Albert Lea	1910	1-13
	Elbow Lake	1909	1-2
	Melrose	1909	1-4
	Plainview	1911	1-4
	Sauk Centre	1909	1-8
Mississippi	Bolton	1910	1-2
	Wesson	1910	1-6
Montana	Haroin	1910	1
Nebraska	Ansley	1912	1
	Grand Island	1909	1-24
	Red Cloud	1912	1-4
	Harvard	1912	1-2
	Rockville	1912	1
	Superior	1912	1-7
	Sutton	1912	1-5
New Hampshire	Hanover	1912	1-6
	Lebanon	1912	1-13
New Jersey	Cape May	1912	1-4
	Hopewell	1912	1-6
	Lakehurst	1911	1-3
	New Egypt	1911	1-3
	Pemberton	1911	1-3
	Summit	1911	1-14
	Tuckertown	1909	1-4
	Wrightstown	1911	1
New York	Edmeston	1910	1-2
	Holcomb & E. Bloomfield	1909	1-5
	Livingston Manor	1911	1-4
	Lowville	1909	1-13
	New Hartford	1910	1-3
	North Creek	1912	1-2
	Spencerport	1911	1-4
	Ticonderoga	1912	1-14

to PP

North Carolina	Greenville	1911	1-9	
	Rockingham	1911	1-7	
Ohio	Caledonia	1912	1-2	
	Centerburg	1909	1-3	
Oklahoma	Bennington	1911	1-2	
	Blackwell	1912	2-10	
	Fort Cobb	1912	1	
	Lawton	1912	1-15	
	Madill	1911	1-5	
	Stigler	1911	1-5	
	Stonewall	1911	1-2	
Oregon	Sulphur	1911	1-8	
	Eugene	1912	1-35	
	Island City	1910	1-2	
Pennsylvania	LaGrande	1910	1-32	
	to PP } Beaver Falls	1912	1-40	
		Easton	1911	1-39
		Ephrata	1912	1-7
		Watsonstown	1912	1-9
South Carolina	Camden	1912	1-9	
	Newberry	1911	1-8	
South Dakota	Canton	1911	1-5	
	Dell Rapids	1911	1-4	
	Henry	1910	1-2	
	Mitchell	1909	1-14	
Texas	Bellville	1912	1-5	
Utah	Logan	1911	1-27	
Vermont	Morrisville	1909	1-4	
Washington	Wenatchee	1909	1-17	
West Virginia	Beckley	1911	1-5	
	Bangor	1911	1-3	
Wisconsin	New Richmond	1912	1-7	

BENCH MARKS!

Richard Engeman, formerly of the Oregon Historical Society, is now Librarian, Southern Oregon Historical Society, Jacksonville (Jacksonville Museum).

Sandra J. Lamprecht, California State University, Long Beach, has published: "California: a bibliography of theses and dissertations in geography." Council of Planning Librarians. Exchange Bibliography No. 753. 1975. \$5.50

Harold Otness, Southern Oregon State College, Ashland, has published: "Some English-language guidebooks on Pre-Communist China", in The China Geographer, no. 3 (Winter 1976), pp. 35-39. (commentary on maps therein)

HISTORICAL MAPS IN THE HONNOLD LIBRARY FOR THE CLAREMONT COLLEGES

Jean Beckner
Special Collections Librarian, The Honnold Library

The largest map collection in the Special Collections Department is the Henry Rupp Wagner collection which contains over 600 originals or photostats (from American and European archives and libraries), pertaining to the west coast of North America, from 1507 to 1802. Mr. Wagner assembled these maps, as well as books and manuscripts, as working tools for his writings on voyages of discovery and exploration. He gave the collection to Pomona College, one of the Claremont undergraduate colleges, in 1936.

The collection begins with "Prediscovery Maps." The earliest map we have from this group is a photostat of Peter Appian's "Tipus Orbis Universalis," 1520. The second section, the "Discovery Maps" begins with an anonymous "small sketch MS map of the point of California," 1535, also a photostat. The oldest original map in the collection is from Abraham Ortelius' *Theatrum Orbis Terrarum* (Antwerp, 1570), "Americae sive novi orbis, nova descriptio". There are several original maps dated 1631 of America and Asia by Henricus Hondius, and an anonymous manuscript map of California, ca.1794, showing the Channel Islands in correct alignment. The finding aid for the maps is volume two of Mr. Wagner's *The Cartography of the Northwest Coast of America to the Year 1800*, Berkeley, University of California Press, 1937. The collection does not include all the maps listed in Mr. Wagner's book.

The next largest group of historical maps, about 75, relates to early California and the west, and are part of the William Smith Mason collection. Included are Saltieri, *Il disegno del discoperte della Nuova Franza*, Venice, 1566, and Cram's *New Township and Railroad Map of California*, Chicago, 1877. A large number of these original maps were published in the 18th century. There are cards for most of them in the Library's Public Catalog.

Among some of the earliest maps of Claremont and the San Gabriel Valley are tract maps showing subdivisions. Frank Wheeler, a real estate broker, assembled three scrapbooks, *Claremont Historical Data, 1884-1938*, which contain Claremont tract maps, one dated 1887. In a miscellaneous group of unclassified maps is one modestly titled "The Leading Town Site on the Great Santa Fe Route," published by the Pacific Land Improvement Company, 1888. One in 1888 shows the "Hotel Claremont," which later became the first building of Pomona College. Two other unique items are a map of Claremont's first water mains, 1897, and Sanborn's *Fire Insurance Map of Claremont, 1925*.

Among the papers of early water engineers are maps of flood control districts, well locations, irrigation plans, spreading grounds, and routes of aqueducts. These are part of the Water Resources Development of South-

ern California Collection, which includes San Gabriel Valley, San Bernardino-Riverside area, the Owens Valley and Imperial Valley and San Diego County from about 1880 to 1950.

There are a few historical maps in other collections. The Nordic Collection contains a 1695 map by S. Sanson, and mid 18th century maps of Estonia, Latvia and Luthuania. The Asian Studies Department has a *Postal Map of China, 1917*, published in 1918. The Geology Library at Pomona College has two copies of William Smith's famous geological maps, *Delineation of the Strata of England and Wales, with part of Scotland; exhibiting. . . the variations of soil according to the variations in the substrata*, London, J. Cary, 1815.

Professor A. O. Woodford, Pomona College Geology Department (emeritus) gave the library an unusual manuscript map entitled, "Road to California, for Mr. Sparks." The map was used for a trip taken in 1852 or 1853 from Salt Lake City to Sacramento City, and in general follows the emigrant trail to the gold fields. It appears to have been drawn from personal experience with detailed mileage guides, indications of hot springs, poison springs, major streams, settlements, obstacles, place names, crossing and branching trails, water and feed information, and "Don't take this road" warnings. Drawn in ink on paper, it covers both sides of the sheet.

Only a smallpart of the historical maps in Special Collections have been cataloged, however they may be located through various finding lists. Occasional additions are acquired through gifts.

[continued from p. 46] CARTOGRAPHIC CONFERENCES

Second Conference on Maps and Map Librarianship, sponsored by the Geography and Map Group, Washington, D.C. Chapter, Special Libraries Association, will be held on October 15 and 16, 1976.

The first day of the conference will be held at the U.S.G.S. National Center in Reston, Virginia. The program will consist of morning and afternoon sessions devoted to papers on topics of special interest to geography and map librarians, a tour of the Earth Sciences Library, and the map collection. A cash bar and dinner, with speaker, will be held in the evening at the Dulles Marriot Hotel at nearby Dulles International Airport.

The Saturday program will be a tour of Alexandria, led by Donald Wise.

If you would like to present a professional paper on a topic of interest to geography and map librarians, please send the title and an abstract, by July 1, to:

Planning Committee
Second Conference on Maps and Map Librarianship
c/o Library of Congress, Geography and Map Division
845 South Pickett Street
Alexandria, Virginia 22304

Richard W. Stephenson is Chairman of the Conference.

NEW MAPPING OF WESTERN NORTH AMERICA

CONTRIBUTIONS BY:

MA= Mary B. Ansari, Univ. Nevada, Reno.
 MB= Mary Blakeley, Univ. Arizona, Tucson.
 LC= Larry Cruse, Univ. Calif., San Diego.
 PH= Phil Hoehn, Univ. Calif., Berkeley.
 JR= Janet Rudd, Univ. Calif., Berkeley.
 ET= Edward Thatcher, Univ. Oregon, Eugene.
 TT= Tommy Thompson, Map Centre, San Diego.
 EP= The Editor. (from Publishers/& in hand)

RECENT NEVADA MAPPING MA

This report covers new mapping of Nevada, with particular emphasis on environmental and flood-prone-area mapping. Listed below are newly issued maps from the Nevada Bureau of Mines and Geology. Order from the Publications Office, Nevada Bureau of Mines and Geology, University of Nevada, Reno, Nevada 89507.

Rockhound's Map of Nevada, by J. B. Murphy, S. L. Nichols, and J. H. Schilling. Special Publication 1. 1975. \$3.00. [col. map. Pin-points over 200 rock and mineral locations in State; includes a bibliography.]

Nevada's Weather and Climate, by J. G. Houghton, C. M. Sakamoto, and R. O. Gifford. Special Publication 2. 1975. \$4.00 [78p.; this text contains approximately 30 maps on Nevada's climate, landforms, precipitation, temperature, growing season, snowfall, evaporation, and vegetation.]

Late Pleistocene Lakes and Glaciers in the Great Basin, by G. Q. King. 1:1,000,000. Open-file Report. 1975. \$4.00 [Includes a 46-item bibliography.]

The following environmental maps have been published since the last report in WAML Information Bulletin, v. 6, no. 2, March 1975. The environmental maps are issued at a scale of 1:24,000 on a base modified from the 7½' U.S. Geological Survey topographic map of that quadrangle. These maps are for sale for \$2.00 each from the Publications Office (address above).

Elko West Quadrangle Folio: tinted relief map.
 Glenbrook Quadrangle Folio: tinted relief map.
 Las Vegas SW Quadrangle Folio: 1. tinted relief map; 2. slope map.
 Las Vegas NE Quadrangle Folio: tinted relief map.
 Las Vegas NW Quadrangle Folio: tinted relief map.
 Marlette Lake Quadrangle Folio: tinted relief map.
 Reno Quadrangle Folio: 1. land use map; 2. hydrologic map; 3. earthquake hazards map; 4. physical properties map.
 Reno NE Quadrangle Folio: slope map.
 Reno NW Quadrangle Folio: slope map.
 Spanish Springs Quadrangle Folio: slope map.
 Steamboat Quadrangle Folio: slope map.
 Verdi Quadrangle Folio: slope map.
 Vista Quadrangle Folio: slope map.
 Washoe City Quadrangle Folio: 1. slope map; 2. geologic map;
 3. hydrologic map.

The following flood-prone-area quadrangle maps are issued in black and white, at scales of 1:24,000 and 1:62,500. They are available free upon request from the U.S. Geological Survey, Water Resources Division, 705 N. Plaza, Carson City, Nevada 89701.

Blue Diamond	Fallon	Minden
Blue Diamond SE	Gardnerville	Mt. Rose NW
Blue Diamond NE	Genoa	Overton
Boulder City	Hawthorne	Panaca
Bullfrog	Henderson	Reno NE
Caliente	Las Vegas SE	Reno NW
Carlin	Las Vegas SW	Ruth
Carson City	Las Vegas NE	Tonopah
Comins Lake	Las Vegas NW	Vista
Dayton	Lovelock	Washoe City
Elko East	McGill	Wells
Elko West	Mesquite	Winnemucca
Ely	Mina	Yerington

Limited copies of the following reference are available from the State Land Use Planning Agency, 201 S. Fall Street, Carson City, Nevada 89701:

Nevada Mapping and Aerial Photography Index, sponsored by the Nevada Resource Action Council. 76p. 1975. Free upon request. [This reference uses map indexes to show status of mapping done by the Nevada Bureau of Mines and Geology; Nevada Highway Department; Nevada Water Resources Division; U.S. Bureau of Land Management; U.S. Forest Service; U.S. Geological Survey, Water Resources Div.; and, U.S. Soil Conservation Service.]

The following directory is in progress:

Nevada Map and Air Photo Resources Directory, by M.B. Ansari. Thus far, over 40 libraries and State and Federal agencies in Nevada have returned the questionnaire from which the information for the directory will be derived. Address inquires to Mary B. Ansari, Mines Librarian, Mines Library, University of Nevada, Reno, Nevada 89507. [LATE ANNOUNCEMENT OF PUBLICATION: see "Publications of Relevance".]

ARIZONA MB

[Arizona. University. Division of Physical Resources. Planning Office]
[Map of the] University of Arizona. [Tucson, Ariz.] 1975.
 Scale ca. 1:3,600.

Bufkin, Don
Historic Tucson. [Map in pamphlet with cover title: Through Tucson's history, a self-guided walking tour] Tucson, Ariz., Tucson Branch, AAUW, 1975. Scale ca. 1:8,700.

Development Authority for Tucson's Economy
Tucson's industrial locations map. Tucson, Ariz., DATE[197-]
 Scale not given.

Hastings, James Rodney

An atlas of some plant distributions in the Sonoran Desert,
by James Rodney Hastings, Raymond M. Turner, Douglas K. Warren.
[Tucson, Ariz.] University of Arizona, Institute of Atmospheric
Physics, 1972. xiii, 255p. (Technical reports on the meteor-
ology and climatology of arid regions, no. 21) Scale 1:8,500,000.

Hearne Brothers, Detroit

Official polyconic projection map of greater Tucson with all of
Pima County. Detroit, 1975. Scale 1:22,500.

Pima Association of Governments. Transportation Planning Program.
Tucson area 1973 generalized land use. [Tucson, Ariz.] distr.
by Tucson Blue Print [1974] 79p. Scale 1:135,000.

Southern Arizona Hiking Club

Santa Catalina Mountains, Arizona; a trail and recreation map.
Partially revised by Southern Arizona Rescue Assn. [Tucson,
Ariz.] 1975. Scale 1:62,500.

United States. Forest Service. Southwestern Region.

Mazatzal Wilderness, Tonto National Forest, Arizona. [Albuquer-
que, N.M., 1973?] Scale 1:63,360.

OLD WEST LC

"Historic forts of the old West". [includes historic trails]
Scale approx. 1:5,000,000 free 6253d U.S. Army Hospital
(GOCOM), Building 515, Hamilton Air Force Base, Calif. 94934

*ordered (per ltr.)
6/29/76*

MONTANA LC

U.S. Bureau of Land Management.

Montana Quadrangle Maps (Index map of Printed and Available;
printing approved for FY 1976; planned for FY 1977)

Distribution of Federal Lands administered by BLM/National
Resource Lands [each quad covers 1° x 1°]

Available, end of 1975: Quads #21, #29, #31, #32, #34, #40,
#41, #42.

Planned for 1976: Quads #16, #18.

free BLM, 316 North 26th St., Billings, MT 59101.

BAJA CALIFORNIA TT

Lower California and the Sea of Cortez - Map without words.

A mosaic of 39 color-enhanced satellite pictures taken from 580
miles, winter-spring 1972-1973. ERTS-1 imagery printed with Bands
4, 5, 7, have not been retouched. Created by California Institute
of Earth, Planetary and Life Sciences, Seal Beach, California.

The following are available from Map Centre, 2611 University Ave.,
San Diego, CA 92104: lithographs - 36"h x 12"w =\$8.00 [printed
on medium gloss poster paper]. Various sizes and media available,
write for more information.

CALIFORNIA

LC Air Conditioning Design Temperature Map, San Diego County, California. Second Revision, September 1974, by Research Committee, Air Conditioning Division, Bureau of Home Appliances of San Diego County; printed by the San Diego Gas & Electric Company.

free, from: Bureau of Home Appliances of San Diego County, 233 "A" Street, Suite 1007, San Diego, CA 92101.

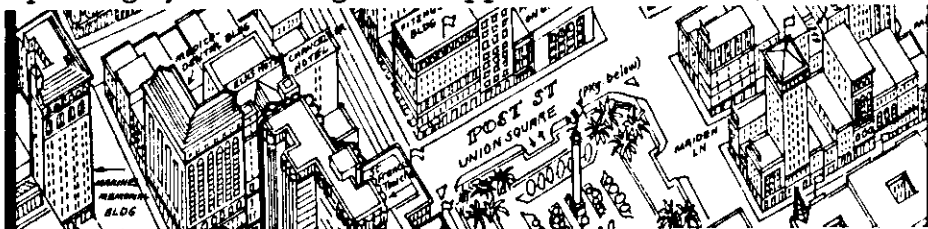
California. Department of Transportation. [CALTRANS]

JR District 10 Bicycle Touring Guide. [District 10 is the San Francisco Bay Area, east through the Sierras.] [1975]

free, from: Emmett Chalk, District Bicycle Coordinator, CALTRANS, P.O. Box 2048, Stockton, CA 95201.

Tomlinson, John.

EP "Like a Walk in San Francisco"; a bird's-eye panoramic map of San Francisco, field compiled & hand drawn showing the financial district, Chinatown, Russian Hill, Nob Hill, Telegraph Hill, North Beach, The Embarcadero, The Jackson Square historic district, and an inset view of civic center. 25" x 28" on Sonata Kidskin stock, suitable for framing. Available by Mail Order from: The Picture Map Co., P.O. Box 141 - Dept. S, San Francisco, CA 94101. \$5.00 (includes postage, handling and applicable taxes).



Jennings, Charles W.

Geologic Data Map No. 1, Fault map of California, with locations of volcanoes, thermal springs, and thermal wells, compiled and interpreted by Charles W. Jennings, has been released by the California Division of Mines and Geology.

EP Prepared over a period of several years, the map is a synthesis of fault and thermal data on a single sheet of paper 4½ x 5 feet (scale 1:750,000). The new map is designed to give an overview of fault structures of the state and includes sufficient detail to be useful for planning, hazard evaluation, and teaching.

This map supersedes CDMG Preliminary Report 13, *Preliminary fault and geologic map of California.*

Sources include data from nearly 1000 references published since 1969; data used have been indexed by area and by author and will be published in CDMG Bulletin 201 (not yet available as of 5/76).

Available rolled, or folded in a 9½ x 11¾" envelope (specify in order), \$5.00 over the counter, or \$6.50 mail orders (California orders add tax): California Division of Mines and Geology, P.O. Box 2980, Sacramento, CA 95812. Checks make payable to the CDMG.

OREGON

Western Guide Publishers.

Oregon gold & gems: maps, then & now. / Copyright R. N. Preston
... -- Portland, Or. : Western Guide Publishers, c1975.

6 maps (some col.) ; 45 x 57cm. ea. with envelope 24 x 16cm.

Maps printed on both sides of sheets.

CONTENTS: [1] State of Oregon mineral and gem deposits; Rockhound rules.

PH -- [2] Oregon 1878; Mining law summary. -- [3] Map of mining district of Eastern Oregon, 1890; Mining map of Southern Oregon, 1904. -- [4] Gold placers in Southwest Oregon; Bohemia Mining District, Lane County, Oregon. -- [5] Western Oregon gold and silver; Northwestern Oregon gold and silver. -- [6] Southwestern Oregon gold and silver; Eastern Oregon gold and silver.
\$ 5.95

Northwest Cartographics.

The Rogue River Canyon, southwestern Oregon River & Trail Guide.
Eugene, OR; Northwest Cartographics, 1976.

1 folded sheet, 59 x 89cm., 1:62,500. Paper \$3.95 (\$4.50 waterproofed).

[Recto: Rogue River, contour and shaded - from Jumpoff Joe Creek, Josephine County to Agness, Curry County (58 miles). Contour interval 250', roads, trails, mines, campsites. Insets:¹Location and access, river profile, trail profile, scale of white water difficulty, detailed sketches of 6 rapids - @ 1:500,000. ²Geology, vegetation - @1:400,000.]

[Verso: Text - including river log, trail log, physical environment, human use, references, flow data in cu. ft./sec. - Apr./Oct.]

ET This is a beautiful map, with additional information, compiled and drawn by a cartographer--geographer--white water boatman. The Rogue River section mapped is well-known in the American West for recreation, old mines, steel-head trout, challenging rapids, steep trails, and magnificent scenery. It is protected Wildreness, approachable only from trails or by boat.

Northwest Cartographics, c/o Dr. Michael Donley, Department of Geography, University of Oregon, Eugene, OR. 97403.

Carto-Photo Corp., Eugene, Oregon 97402 [520 Conger St.]
Willamette Valley aerial photography. Flight WAC-75. Summer 1975. 1:12,000

ET

The greater Willamette Valley of Oregon was filmed with a 8 $\frac{1}{4}$ " focal length Zeiss camera. Contact prints, and enlargements up to 1:1200 are available. Prices: 9" x 9" contact prints - 1st print \$7.00 ea, 2 to 50 \$4.00 ea, over 50 \$3.00 ea. Additional product prices available upon request.

A spot index showing the location of each photo-center is available upon request.

Oregon State Highway Division. Travel Information Service.
Oregon Trail.

EP

As part of the American Bicentennial celebration, a brochure on the Oregon Trail has been issued by the above agency. It features a detailed map of the trail in Oregon. Significant geographical and historical landmarks are on the map as are locations of present-day major highways along the route.

Travel Information Service, 101 Highway Building, Salem, OR 97310.

ATLASES CATALOGED AT UCLA

by

Anna F. Blustein
Associate Librarian (Cataloger)
University Research Library
University of California, Los Angeles

WORLD

--Andree, Richard, 1835-1912.

Andrees Allgemeiner handatlas in 221 haupt- und 192 nebenkarten. Mit vollständigem alphabetischem namenverzeichnis in besonderem bande. Sechste, völlig neubearbeitete und vermehrte auflage. Herausgegeben von dr. Ernst Ambrosius. Bielefeld und Leipzig, Velhagen & Klasing, 1914.

3 p. l., 224 numb. l. incl. 386 col. maps, illus., diagrs. 45½cm.

[not at UCLA:] --- Namenverzeichnis zu Andrees Handatlas. Sechste auflage Bielefeld und Leipzig, Velhagen & Klasing, 1914.

v. 532p. 29cm.

1. Atlases, German. I. Ambrosius, Ernst, 1866-1940. II. Title: Allgemeiner Handatlas.
L.C. Map 35-8

[UCLA Map Library also has eds. for: 1881, 1909, 1912, 1921.]

**G1019.A55a.1914 Map Library

--Oxford University Press.

The new Oxford atlas /prepared by the Cartographic Dept. of the Oxford University Press. -- [2d ed.]. -- London : The Press, 1975.

202 p. : chiefly col. maps ; 29cm.

The 1st ed., by Sir Clinton Gresham Lewis, was published under title "The Oxford atlas" in Sept. 1951; reprinted with revisions: Dec. 1951, 1952, 1954, 1956, 1957, 1958, 1961, 1963, 1966, 1967, 1970.

ISBN 0 19 891108 4.

1. Atlases, British. I. Lewis, Sir Clinton Gresham, 1885- The Oxford atlas. II. Title. III. Title: Oxford atlas.

**G1019.L58o.1975 Map Library

--General Drafting Company, inc.

Man's domain, a thematic atlas of the world : mapping man's relationship with his environment /Norman J. W. Thrower, editor. - 3d. ed. - New York : McGraw-Hill Book Co., [1975]

80p. : col. maps ; 34cm.

Cover title.

Based on the Odyssey world atlas.

Includes index.

ISBN 0-07-023083-8

1. Atlases. I. Thrower, Norman Joseph William, ed. II. The Odyssey world atlas. III. Title. IV. Title: Mapping man's relationship with his environment.

[UCLA has copies in various Branches]
G1019.M317.1975 LC 74-22341 MARC MAP

--National Geographic Society, Washington, D.C. Cartographic Division.

National Geographic atlas of the world /Melville Bell Grosvenor, editor-in-chief ; Gilbert M. Grosvenor, editor ; William T. Peele, chief cartographer ; David W. Cook, associate chief cartographer ; Jules B. Billard, atlas text. -- 4th ed. -- Washington : National Geographic Society, 1975.

330, [1] p. : chiefly col. maps ; 47cm. Maps produced by the Cartographic Division, National Geographic Society.

1. Atlases. 2. Geography.
G1019.N28.1975 LC 75-012655 CIP

--Philip, George, 1870-1937.

Cassell's New atlas : A geographical survey of the new era, dealing with territorial changes & international relations, travel and communications, history and colonisation ... /edited by George Philip. -- London, New York : Cassell and Company, Ltd [1921]

[6], 69, [1] p., 144 l. : 144 col. maps
*G1019.P537c.1921

[WORLD cont']

- Nordenskiöld, Nils Adolf Erik, friherre, 1832-1901.

Facsimile-atlas to the early history of cartography with reproductions of the most important maps printed in the XV and XVI centuries : translated from the Swedish original by Johan Adolf Ekelöf and Clements R. Markham / A. E. Nordenskiöld. -- Stockholm : [Printed by P. A. Norstedt], 1889.

[x], 141 p., 51 fold. leaves of plates : ill., maps ; 53cm.

Translation of Facsimile-atlas till kartografiens äldsta historia, innehållande afbildningar af de viktigaste kartor tryckta före år 1600.

Bibliographical footnotes.

1. Maps, Early - Facsimiles.

2. Cartography - History. 3. Geography - 15th-16th centuries. I. Title.

**G1025.N755fE.1889 Spec. Collections

- Westermann, Georg, firm, publishers, Brunswick.

Grosser Atlas zur Weltgeschichte / hrsg. von Hans-Erich Stier ... [et al.] -- 8. Aufl. -- Braunschweig : G. Westermann Verlag, 1972.

[viii], 170, 78p. : chiefly col. maps ; 30cm.

Originally published under title: Atlas zur Weltgeschichte.

1966 ed. has title: Westermanns grosser Atlas zur Weltgeschichte. ISBN. 3-14-100919-8.

1. Geography, Historical - Maps.

I. Stier, Hans Erich, 1902- II. Title.

III. Title: Atlas zur Weltgeschichte.

IV. Title: Westermanns grosser Atlas zur Weltgeschichte.

*G1030.W52a.1972 College Library

- Stembridge, Jasper Harry, 1889-

The Oxford war atlas /by Jasper H. Stembridge. -- London : Oxford University Press, H. Milford, 1941-

v. : ill., maps ; 19cm.

Contents: v. 1. The first two years, Sept. 1939 - Sept. 1941. --v. 2.

Sept. 1, 1941 - Jan. 1, 1943. --v. 3. The war in 1943.

G1038.S824o.1941 Univ. Research Lib. [Library has only v.3 (publ. 1944).]

UNITED STATES

- Kloss, Heinz.

Atlas der im 19. [i.e. neunzehnten] und frühen 20. Jh. entstandenen deutschen Siedlungen in USA =Atlas of 19th and early 20th century German-American settlements /Heinz Kloss. - Marburg : Elwert, 1974.

17 p., [108] leaves of plates : chiefly fold. maps : 65cm.

On cover: Atlas der deutschen Siedlungen in USA. Atlas of German-American settlements.

English and German.

ISBN 3-7708-0503-8.

1. Germans in the United States-Maps. I. Title.

G1201.E27K69.1974 LC 75-510279 MARC

- Oxford University Press.

The United States and Canada /prepared by the Cartographic Department of Oxford University Press ; advisory editors, John D. Chapman, John C. Sherman. -- 2d ed. /prepared with the assistance of Quentin H. Stanford. -- London : Oxford University Press, 1975.

[xii], 128, [37]p. : chiefly col. maps ; 27cm. -- (Oxford regional economic atlas)

Col. map on end papers.

Cased: ISBN 019-894309-1.

1. United States - Economic conditions - Maps. 2. Canada - Economic conditions - Maps.

G1201.G1098.1975 Reference

- Smith, Allen R.

Connecticut : a thematic atlas / by Allen R. Smith. -- [s.l. : s.n.], 1974.

90 p. : chiefly maps ; 28 x 36cm.

Scale of maps ca. 1:750,000.

Bibliography: p. 90.

1. Connecticut - Maps. I. Title.

*G1240.S642c.1974 Map Library

- Rizza, Paul F.

Pennsylvania atlas : a thematic atlas of the Keystone State /Paul F. Rizza, James C. Hughes, Allen R. Smith. -- Berlin, Conn. : Atlas Publishing Inc., 1975.

108 p. : chiefly maps ; 28 x 37cm.

Overlay in pocket. *G1260.R529p.1975

[United States, cont']

- North Carolina atlas : portrait of a changing southern state /edited by James W. Clay, Douglas M. Orr, Jr., Alfred W. Stuart ; foreword by James E. Holshouser, Jr. -- Chapel Hill : University of North Carolina Press, [1975]
- xi, 331p. : ill. (some col.), maps (some col.) ; 23 x 29cm.
Includes bibliographies.
ISBN 0-8078-1244-7.
1. North Carolina - Maps. 2. North Carolina. I. Clay, James W. II. Orr, Douglas Milton. III. Stuart, Alfred W. G1300.N813.1975 Reference
- Rockford Map Publishers, Rockford, Ill.
Illinois State atlas. -- Rev. ed. -- Rockford, Ill. : Rockford Map Publishers, 1973.
- 232p. : ill., maps ; 28cm.
Previous editions published under title: Enjoy Illinois: State atlas. "Copyright 1966, revised 1973."
1. Illinois - Road maps. 2. Recreation areas - Illinois. I. Title. II. Title: Enjoy Illinois: State atlas. G1405.R591e.1973 Map Library
- Rockford Map Publishers, Rockford, Ill.
Michigan State atlas. -- Rev. ed. -- Rockford, Ill. : Rockford Map Publishers, 1973.
- 230p. : ill., maps ; 29cm.
"Copyright 1970, revised 1973"
Cover title.
1. Michigan - Road maps. 2. Recreation areas - Michigan. I. Title. G1410.R591m.1973 Map Library
- Rockford Map Publishers, Rockford, Ill.
Wisconsin State atlas. -- Rev. ed. -- Rockford, Ill. : Rockford Map Publishers, 1975.
- 288p. : ill., maps ; 29cm.
"Copyright 1970, revised 1975."
Cover title.
1. Wisconsin - Road maps. 2. Recreation areas - Wisconsin. I. Title. G1415.R591w.1975 Map Library [Map Library also has 1973 ed.]
- Rockford Map Publishers, Rockford, Ill.
The Rockford State atlas : Minnesota. -- [Rev. ed.]. -- Rockford, Ill. : Rockford Map Publishers, 1972.
- 242p. : ill., maps ; 29cm.
Cover title.
Previous edition published under title: Magnificent Minnesota: State atlas and vacation guide.
1. Minnesota - Road maps. 2. Recreation areas - Minnesota. I. Title. II. Title: Minnesota. III. Title: Magnificent Minnesota: State atlas and vacation guide. G1426.E63R59.1972 Map Library [Map Library also has 1968 ed.]
- United States. Forest Service. Pacific Northwest Region.
Malheur National Forest, soil resource inventory maps / soil mapping by U.S.F.S. Pacific Northwest Region ; soil scientists, Garwin Carlson and Earle Rother. -- [Portland, Or. : The Service], 1974.
- [ii], 33 leaves of plates : 33 fold. maps ; 29cm. -- (U.S.F.S. ; R-6-1974)
Cover title: Soil resource inventory, atlas of maps, Malheur National Forest.
1. Soils - Oregon - Malheur National Forest - Maps. I. Title. G1491.J3U58.1974 Map Library
- MEXICO
- Miller, Tom.
The Baja book; a complete map-guide to today's Baja California, by Tom Miller and Elmar Baxter. With foreword by Ray Cannon. Mike Glover: art director. Carles Larson: illus. [Santa Ana, Calif., Baja Trail Pub., c1974]
- 176p. illus., maps. 25cm. \$7.95
Bibliography: p. 174-175.
1. Baja California - Road maps. 2. Baja California - Description and travel - Guide books. I. Baxter, Elmer, joint author. II. Title. LC 73-93583 G1547.B3M618.1974 Map Library MARC
- CENTRAL AMERICA
- Nuhn, Helmut
Zentralamerika : Karten zur Bevölkerungs- und Wirtschaftsstruktur / hrsg. von

[CENTRAL AMERICA, cont']

H. Nuhn in Zusammenarbeit mit P. Krieg und W. Schlick. -- Hamburg : Wirtschaftsgeographische Abteilung, Institut für Geographie und Wirtschaftsgeographie der Universität Hamburg, 1975.

xv, 180p., 10 fold. leaves of plates : ill., maps (10 (some col.) in pocket) ; 30cm. -- (Beiträge zur geographischen Regionalforschung in Lateinamerika ; Band 1)

Text in German. Text on maps in German and Spanish. Includes bibliographies.

1. Central America - Economic conditions - Maps. 2. Central America - Industries - Maps. 3. Central America - Population - Maps. I. Krieg, Peter. II. Schlick, W. III. Hamburg. Universität. Institut für Geographie und Wirtschaftsgeographie. Wirtschaftsgeographische Abteilung. IV. Title. V. Series.

*G1551.G1N899.1975 NonCirc Read. Ctn.

- Guatemala. Instituto Geográfico Nacional.

Atlas nacional de Guatemala.

[1. ed. Guatemala, 1972]

1 v. (various pagings) illus. (part col.), col. maps. 46 x 57cm.

Cover title.

1. Guatemala - Maps. 2. Guatemala - Description and travel. I. Title.

**G1555.G932an.1972 Map Library
LC 74-650019

SOUTH AMERICA

- Araya, Guillermo, 1931-

Atlas lingüístico-etnográfico del sur de Chile : (ALESUCH) / Guillermo Araya (director) ... [et al.] - Valdivia : Instituto de Filología de la Universidad Austral de Chile, 1973-

v. in portfolios : chiefly maps : 27cm.

[Author's full] name is: Goubet Araya, Guillermo.]

1. Spanish language - Dialects - Chile - Maps. 2. Spanish language - Provincialisms - Chile. I. Title.

G1751.E3A66.1973 NonCirc Read. Ctn.
LC 75-527730

- Araya, Guillermo, 1931-

Atlas lingüístico-etnográfico del Sur de Chile (ALESUCH) : preliminares y cuestionario / Guillermo Araya. -- Valdivia : Instituto de Filología, Facultad de Filosofía y Letras, Universidad Austral de Chile, 1968.

76, [1] p. : ill. ; 25cm. -- (Anejos de Estudios Filológicos ; no. 1)

Vol. 1 of the Atlas was published in 1973.

G1751.E3A66.1973 Text. NonCirc Read.Ctn.

- Atlas das potencialidades brasileiras : Brazil grande e forte / [planejamento cartográfico e textos, Beatriz Maria Soares Pontes... et al. ; elaboração, Departamento Editorial das Edições Melhoramentos ; supervisão editorial da Fundação Nacional de Material Escolar-FENAME]. - 1. ed. - [Rio de Janeiro] : MEC, F.N.D.E., [1974]

158, [1] p. : col. ill., col. maps : 38cm. "Lança a Fundação Nacional de Material Escolar esta 1.ª edição do presente Atlas em convênio com o Fundo Nacional de Desenvolvimento da Educação ... em co-edição com a Companhia Melhoramentos de São Paulo."

Bibliography : p. [159]

1. Brazil - Maps. 2. Brazil - Economic conditions - Maps. I. Pontes, Beatriz Maria Soares. II. Fundação Nacional de Material Escolar. III. Fundo Nacional de Desenvolvimento da Educação.

*G1775.A881.1974 Map Library
LC 75-580535

EUROPE

- Hungary. Országos Földügyi és Térképészeti Hivatal.
Magyarország tervezési-gazdasági körzetei / a térképészeti munkákat irányította a Kartográfiai Vállalat szerkesztő bizottsága, elnök Radó Sándor. - Budapest : Mezőgazdasági és Élelmezésügyi Minisztérium Országos Földügyi és Térképészeti Hivatala, 1974.

6 v. : col. maps ; 40 x 57cm.

One or 2 transparent overlays in pocket in each volume. Accompanied by an index (23 leaves, 26 x 38cm.)

[EUROPE, Cont']

titled "Economy-planning regions of Hungary; appendix", in Hungarian and English.

CONTENTS: 1. A Központi-Körzet atlasza. --2. Észak-Magyarország atlasza. --3. Az Észak-Alföld atlasza. --4. A Dél-Alföld atlasza. --5. Az Észak-Dunántúl atlasza. --6. A Dél-Dunántúl atlasza.

1. Hungary - Maps. 2. Hungary - Economic conditions - Maps. 3. Hungary - Social conditions - Maps. I. Radó, Sándor. II. Kartográfiai Vállalat, Budapest. III. Title. IV. Title: Economy planning regions of Hungary.

**G1940.H894m.1974 Map Library [Map Library has 6 v. plus index.]

- Elsevier, Uitgevers Maatschappij, N. V. Geografisch en Cartografisch Instituut.
Beneluxatlas. Atlas van België, Nederland en Luxemburg. Met duizenden plaatsnamen, spoorwegen, wegenet en andere aardrijkskundige bijzonderheden. [Samengesteld door Het geografisch en cartografisch instituut Elsevier. Red. A.F.J. Wubbe. Tekstverzorging H. Bruyninckx en C. Holshuysen. Ills. R. Berkenbosch. Adviseur H. van der Haegen] Amsterdam, Elsevier, 1972.

168p. illus. 20cm. fl 14.90

1. Benelux countries - Maps. 2. Benelux countries - Description and travel. I. Title. LC 73-650093 G1855.E49b.1972 URL stacks

- Horodyska-Gadkowska, Halina
Atlas gwar mazowieckich / Halina Horodyska-Gadkowska, Alina Strzyzewska-Zaremba. -- Wrocław : Zakład Narodowy im. Ossolińskich, 1971-
portfolios (fold. leaves of plates) : all maps ; 30cm. & text (v. ; 21cm.) Title from cover of portfolio. Text for each vol. of maps laid in corresponding portfolio.
At head of title: v.1-2, Komitet Językoznawstwa, Polskiej Akademii Nauk; v.3- Polska Akademia Nauk, Instytut Języka Polskiego.

Vol. 2- by Anna Kowalska and Alina Strzyzewska-Zaremba.

Bibliography in text volumes.

1. Polish language - Dialects - Masovia. 2. Polish language - Maps. I. Strzyzewska-Zaremba, Alina. II. Kowalska, Anna. III. Polska Akademia Nauk. Instytut Języka Polskiego. V. Title.

*G1951.E3H78.1971 NonCirc Reading Ctn. UCLA has v.1-3 (atlas + text for ea. v.)
Each atlas contains 50 loose maps.

- Atlas de Catalunya: geogràfic, econòmic, històric. 1. ed. [Barcelona, Difàfora, 1974]

79, [1] p. (chiefly col. ill., col. maps) 30cm.

ISBN 84-300-6031-6 LC 75-591092

1. Catalonia - Maps. 2. Catalonia - Economic conditions - Maps. 3. Catalonia - Historical geography - Maps. 4. Names, Geographical - Catalonia. *G1968.C28A88.1974

MIDDLE EAST

- Gilbert, Martin, 1936-
Atlas of the Arab-Israeli conflict. [1st American ed.] New York, Macmillan [1975,c1974]
[11] p., 101 (i.e. 106) p. of maps. 24cm.
London ed. published in 1974 under title: The Arab-Israeli conflict: its history in maps.
ISBN 0-02-543370-9 : \$6.95 LC74-13917
1. Near East-Historical geography-Maps. 2. Jews-Historical geography-Maps. 3. Arabs-Historical geography-Maps. 4. Jewish-Arab relations-History. I. Title. II. Title: The Arab-Israeli conflict: its history in maps. G2206.S1G374.1975 Reference

ASIA

- Vietnam. Nha Đia-Dự Quốc-Gia.
Viet-nam, 1:500,000 / Nha Đia-Dự Quốc-Gia. -- Dalat : 1961-64.
1 portfolio (12 sheets of col. maps

[ASIA, cont']

61 x 96cm. fold. to 31 x 12cm.

At head of title: Ban đồ hành chánh - đường sá.

CONTENTS: Côn Tho, Dalat, Hải Phòng, Hà Nội, Huế, Paksé (Laos), Phnom Penh (Cambodia), Qui Nhon, Sài Gòn, Sơn Tây, Vientiane (Laos), Vinh.

1. Vietnam - Maps. 2. Pnom-Penh, Cambodia - Maps. 3. Paksé, Laos - Maps. 4. Vientiane, Laos - Maps. I. Title. II. Title: Ban đồ hành chánh - đường sá.

*G2368.V67V67.1961 Map Library

--Thailand. Krom Phānthī Thahān.

Thailand national resources atlas / prepared by the Royal Thai Survey Dept., Supreme Command Headquarters. -- [Rev. ed.]. -- [Bangkok?]: Royal Thai Survey Dept., Supreme Command Headquarters, 1972.

[iii], 66 leaves in various pagings, 17 leaves of plates : 17 col. maps ; 78cm. English and Thai.

1. Natural resources - Thailand - Maps. 2. Thailand - Economic conditions - Maps. 3. Thailand - Social conditions - Maps. I. Title. II. Title: National resources atlas.

***G2376.G3T32.1972 Map Library

AFRICA

--Commission for Technical Co-operation in Africa.

Carte des sols d'Afrique. Soil map of Africa. [Coordination générale: J.L. D'Hoore] Lagos, 1964.

7 col. maps on sheets 59 x 100cm. fold. in portfolio 30 x 26cm.

(Its Joint project no. 11) Scale: 1:5,000,000. Cover title. "Inter-african Pedological Service Joint project no. 11." "Zenithal equal area meridional projection, centre of projection Intersection of Equator and 18° east longitude." "Fond topographique du Trigonometrical Survey, Pretoria, 1959. Institut géographique militaire, Bruxelles, 1963."

Each sheet includes index of sheets.

Explanatory monograph, by J. L. D'Hoore. Lagos, 1964 [i.e. 1965]

205p. 6 fold. col. maps. 24cm. (Its Joint project no. 11)

Publication no. 93.

Includes bibliographies.

I. Soils-Africa-Maps. I. Hoore, J.L., d' II. Interafrican Pedological Service. III. Title. IV. Title: Soil Map of Africa. V. Series. VI. Series: Commission for Technical Co-operation in Africa. Publication no. 93.

*G8201.J3.1964.C737c Map Library

*G8201.J3.1964.C737c.Text Map Library
LC Map 65-178

--Smet, Roger E. de

Cartes de la densité et de la localisation de la population de l'ancienne province de Léopoldville (République démocratique du Congo) / par R. E. de Smet. --[Bruxelles?] : Centre scientifique et médical de l'Université libre de Bruxelles en Afrique centrale "CEMUBAC", 1966.

[1], 46 p., 3 leaves of plates : 3 fold. col. maps ; 37cm.

Title from cover of portfolio in which issued. Scale of maps 1:1,000,000.

Includes bibliography.

1. Kinshasa, Zaïre (Region) - Population - Maps. 2. Kinshasa, Zaïre (Region) - Maps. I. Centre Scientifique et Médical de l'Université Libre de Bruxelles en Afrique Centrale. II. Title. III. Title: La population de l'ancienne province de Léopoldville (République démocratique du Congo).

*G2603.K62S63.1966 NonCirc Read. Ctn.

--Tectonique de l'Afrique. Tectonics of Africa. Paris, Unesco, 1971.

.... maps (1 fold in pocket) 28cm.

.... (UNESCO Document SC.70/XVII.6 /AF)(Sciences de la terre. Earth sciences, 6)

Unipub, New York, distributor. \$35.00
LC 72-75842 (entry here not complete)
QE320.T227 Map Library

PUBLICATIONS OF RELEVANCE

Contributions by: AB = Anna Blustein PH = Phil Hoehn
 SL = Sandra Lamprecht JR = Janet Rudd EP = The Editor

Nancy Kline, Map Librarian at the University of Connecticut, Storrs, produced in November of 1974 two video-tape programs entitled "Maps for Information" and "Map Librarianship". I enjoyed viewing them both and found them well produced and information-packed as well. The first tape especially has very good potential for showing to geography map reading and cartography classes.

SL

Copies of the tapes are available from Mr. Dan Radomski at the Connecticut State Library, 231 Capitol Ave., Hartford, Conn. 06115. Be sure to send two blank video-tapes with your request.

Colorado. University. Business Research Division.

Travel trends in the United States and Canada. Boulder, CO., (1969).
 98p.

SL

Available statistics on travel in the U.S. and Canada (i.e., total visits to state parks from 1950 to 1967) are presented in tabular form. Also included is a list of 240 sources of information utilized for the compilation of data.

Altengarten, James S. and Gary Anderson Molyneaux.

History, Philosophy, and Methodology of Geography: a bibliography selected for education and research. Department of Geography, University of Illinois at Urbana-Champaign. 56p. \$5.50

EP

Council of Planning Librarians, Exchange Bibliographies, P.O. Box 229, Monticello, IL 61856

U.S. Bureau of the Census. International Statistical Programs Center.

Countries of the World - Year of Latest Population Census.

col. map (no scale) on sheet 10½ x 16". "Information to January 1, 1975" For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or any U.S. Department of Commerce District office. Price .25¢ No. ISP-WCC-75 (not G.P.O. Stock No.; i.e., map no.) Prepared February 1975.

EP

Ansari, Mary B.

Nevada Collections of Maps and Aerial Photographs. Camp Nevada Monograph No. 2. 40p. soft-cover Reno, Camp Nevada, April 1976.

PH

WAML Member Mary Ansari, Mines Librarian, University of Nevada, Reno, has done us a great service by compiling this directory. There are 56 entries that include public and private collections. Although most of the holdings are in major Nevada cities, smaller communities such as Beowawe, Minden, Fallon, and Hawthorne are included.

\$2.00 Order from: Camp Nevada, P.O. Box 13798, Reno, NV 89507.

Camp Nevada Monograph No. 1 is PYRAMID LAKE - A BIBLIOGRAPHY, by Alvin R. McLane, September 1975 (\$3.50).

Hecht, Arthur and William J. Heynen.

Records and Policies of the Post Office Department Relating to Place-names. Compiled by Arthur Hecht and William J. Heynen. Reference Information Paper No. 72. National Archives and Records Service. Washington, 1975. 16p.

EP

Appendix I: Lists, tables, guides, and directories of Post Offices in the United States; Appendix II: Chronological list of post-route maps, 1867-94 (filed in the Archives among the records of the Post Office Department); Appendix III: Chronological list of post-route maps, 1866-84 (filed in the Archives among records of agencies other than the Post Office Department).

Hoover, Dwight W.

Cities. Edited by Dr. Dwight W. Hoover, Professor of American History at Ball State University. R.R. Bowker Co., 1976. 6 x 9". 231p. Index. ISBN 0-8352-0770-0. \$14.95 plus shipping and handling. LC 76-2601.

EP

This is the first volume of a new R.R. Bowker series entitled: Bibliographic Guides for Contemporary Collections Series. It is a subject-arranged and annotated listing of 1,054 selected books, games, journals, films, filmstrips and other items on the American urban experience. A selected listing of journals on urban themes, a producer/distributor directory, and author and title indexes are also presented.

British Standards Institution.

Recommendations for bibliographical references to maps and charts. Part 1: References in accessions lists. London, British Standards Institution, 1975. 8p. \$7.30 (BS 5195, Pt. 1) ISBN 0-580-08762-X

EP

Available from: BSI Sales Dept., 101 Pentonville Rd., London N1 9ND, England. This standard applies to single-sheet maps, multi-sheet maps, maps in series and maps in atlases. Part 2 of the standard will concern references in books and periodical articles.

Daehn, Ralph M.

Directory of Canadian Map Collections. Compiled by Ralph M. Daehn, Map Librarian, University of Guelph. Second Edition, 1975.

This edition includes 115 map collections throughout Canada, as well as a number of indexes to provide various points of access to the information contained in the entries. Arrangement by province, city, and full name of the map collections. A table of abbreviations is included. Information on collections is standardized in three areas: identification and communication, staffing, collection and service.

EP

CAN \$4.00 to A.C.M.L. Members; CAN \$6.00 for Non-members. Make checks payable to A.C.M.L. and send to: Association of Canadian Map Libraries, c/o National Map Collection, Public Archives of Canada, 395 Wellington Street, Ottawa, Ontario, K1A 0N3 Canada.

Hoehn, R. Philip.

Union list of map series: Mexico and Central America, held by the libraries of The University of California and Stanford University. Berkeley,

EP

The Bancroft Library, University of California, February 1976. 6p. 8½ x 11" typescript.

This first edition includes Stanford U., UC Berkeley's Map Room & Bancroft Library, UC San Diego, Scripps Institution of Oceanography, UC Santa Barbara, and UC Santa Cruz.

U.S. Department of Transportation. Office of the Assistant Secretary for Environment, Safety and Consumer Affairs.
Bart / Trails: a study of the commuter and recreational trail potential to the Bay Area Rapid Transit System. Washington, DC, February 1974.

JR DOT P 5600.2 Prepared by: Hart, Krivatsy, Stubee; in association with Robert Conradt; Michael Painter & Associates.

Includes bicycling, riding, and hiking trails.

AB =all successive entries

Barton, Robert, 1942-

Atlas of the sea / Robert Barton ; illustrated by David Nockels ; maps by Geographical Projects, London. -- New York : John Day Co., 1974.

128p. : col. ill., col. maps ; 31cm. ISBN 0-381-98267-X. \$10.00
 1. Oceanography. 2. Marine resources. I. Title. *GC21.B285a UCLA
 (Not really an atlas.)

Canada. Permanent Committee on Geographical Names.

Ontario / Canadian Permanent Committee on Geographical Names. - 2d ed.
 Ottawa : Published for ... by Surveys and Mapping Branch, Dept. of Energy, Mines and Resources. 1974.

xxxiii, 823p. : fold. map ; 25cm. - (Gazetteer of Canada)
 Prefatory matter in English and French. CAN \$12.00 (Kept up-to-date with annual supplements.) 1. Ontario-Gazetteers. I. Title.
 F1056.4.059.1974 Map Library LC 75-324314 MARC Map Library also has 1st ed., 1962. UCLA

Churgin, James.

Temperature, salinity, oxygen, and phosphate in waters off United States.
 James Churgin and Sylvester J. Halminski. - Washington : U.S. Dept. of Commerce, National Oceanic and Atmospheric Administration, Environmental Data Service : for sale by the Supt. of Docs., U.S. Govt. Print. Off., 1974.

3 v. : ill. ; 40 x 60cm. - (Key to oceanographic records documentation ; no. 2) Includes bibliographies. CONTENTS: v. 1. Western North Atlantic. v. 2. Gulf of Mexico. v. 3. Eastern North Pacific. \$10.40
 1. Oceanography - Atlantic coast (United States). 2. Oceanography - Mexico, Gulf of. 3. Oceanography-Pacific Coast. I. Halminski, Sylvester J., joint author. II. Title. III. Series. LC 74-603124 MARC
 **GC58.C475t Map Library has all 3 v. UCLA

Clyde Cruising Club.

Sailing directions and anchorages, west coast of Scotland / Clyde Cruising Club. -- 10th ed. -- Glasgow : Gilmour & Lawrence, 1974.

327p. : maps. 1. Pilot guides - Scotland. I. Title.
 VK833.C629s.1974 Map Library UCLA

Elving, Bruce F.

FM atlas and station directory / by Bruce F. Elving. -- 3d ed. -- Adolph, Minn. : FM Atlas Publishing Co., 1975.

96p. : maps ; 22cm. 1. Radio stations - North America - Direct. 2. Radio stations - Central America - Direct. I. Title.
 TK6555.E51f.1975 Map Library UCLA

Dutton, Davis.

Where to take your children in northern California, by Davis Dutton & Tedi Pilgreen. Los Angeles, Ward Ritchie Press [1972]

128 p. illus 18cm. \$1.95 1. California - Description and travel - Guide-books. I. Pilgreen, Tedi, joint author. II. Title. LC 72-189139 F859.3.D954w Map Library UCLA

Lamar, Donald Lee.

Geology of the Elysian Park-Repetto Hills area, Los Angeles County, California / by Donald L. Lamar. -- San Francisco : California Division of Mines and Geology, 1970.

45p., 2 leaves of plates : ill., maps (2 fold. col. in pocket) : (Special report - California Division of Mines and Geology ; 101)

Main part of the work was done by the author for his Ph.D. thesis at UCLA in 1961. Bibliography: p. 40-45. QE90.E52L16 Map Library UCLA

Los Angeles, Calif. Dept. of City Planning. Citywide Planning and Development Division.

1970 census selected social and economic characteristics for the geographic divisions of the City of Los Angeles / prepared by -- Los Angeles : Dept. of City Planning, 1973.

[vii], 136p. : chiefly col. maps, tables ; 29 cm. -- (Research monograph RM-PRS - Los Angeles, Calif., Dept. of City Planning ; 540) Cover title: The city of Los Angeles 1970 census: selected social and economic characteristics of the geographic divisions. HN80.L8A5.1973 Map Library UCLA

Margolin, Malcolm.

The East Bay out : an unauthorized guide to hiking, camping, swimming, and fishing in the East Bay regional parks / Malcolm Margolin ; ill., Nancy Curry. - Berkeley, Calif. : Heyday Books, [1974]

110p. : ill. ; 23cm. \$2.95 1. Parks-California-San Francisco Bay Region. 2. San Francisco Bay Region-Description and travel. I. Title. F868.S156M25 Map Library UCLA LC 74-189547 MARC

Robinson, John W.

Mt. Pinchot, by John W. Robinson, with the editors of Wilderness Press, Thomas Winnett, editor-in-chief. Berkeley, Wilderness Press, [1974]

88p. illus., maps (1 fold. in pocket) 16cm. (High Sierra hiking guide no. 14) \$2.95 Bibliography: p.85-86. LC 73-93010 MARC

1. Mount Pinchot region, Calif.-Description and travel-Guide books. F868.K4R56 Map Library UCLA

Wheelock, Walt

Baja California guidebook : a descriptive traveler's guide ... / by Walt Wheelock and Howard E. Gulick. -- 5th ed., up-to-date revision. -- Glendale, Calif. : Arthur H. Clark Co., 1975.

232p. : ill., maps (3 fold. col. in pocket) ; 22 cm. "Formerly Lower California Guidebook by Gerhard and Gulick." Bibliography: p. [219]-222. F1246.G315&.1975 Map Library UCLA

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PR =Publications of Relevance

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RE: (Rosanna Miller)

Ansari, Mary B.

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#3, p.72: "Atlases Cataloged at UCLA".
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#3, p.78: (contributor to NMWNA)

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- #1, p.33: "Mexico's CETENAL: La Comision de Estudios del Territorio Nacional"

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[Late Arrival - Timely Announcement]

Of Atlases and Adventures

April 28 to June 23, 1976: Currently on display in the University Library, California State Library, Long Beach, is an exhibit entitled: "Of Atlases and Adventures; Rare and Restricted Geography Books in the California State University, Long Beach Library".

The exhibit features original and facsimile editions of various voyages of exploration to exotic lands and famous atlases of the 16th and 17th centuries.

To coincide with the exhibit, an annotated bibliography entitled: Of Atlases and Adventures; An Annotated Bibliography of Rare and Restricted Geography Books in the CSULB Library, has been published. It cites 109 books, and has been compiled by Sandra J. Lamprecht, Geography and Map Librarian.

Those interested in acquiring a copy of the bibliography (ii, 38p. 138 x 220mm. April 1976) (gratis), may request one from:

Mrs. Sandra Lamprecht
Geography & Map Librarian
Business, Economics and
Geography Ref. Dept.
The Library
California State University
Long Beach, CA 90840

ADVERTISERS ATTENTION!

The WAML Membership, assembled at the Fullerton Meeting, Oct. 25, 1975, authorized the Editor of the Information Bulletin to accept paid advertisements.

The Editor will accept camera-ready copy for advertisements, based on the following rates (standard 8½" x 11" page), to be located on the inside back cover, the back cover, and inside front cover (at the discretion of the Editor):

½ page:	\$35 one issue	\$65 two issues	\$90 three issues
1 page:	\$55 one issue	\$105 two issues	\$150 three issues

Deadlines for submitting copy are: November issue/Oct. 1; March issue/Feb. 1; June issue/May 1.

Advertising in the Information Bulletin will reach map specialists in need of products and services. This medium can provide a valuable supplement to advertising you presently are doing. We will encourage our Members and Readers to patronize your offering.

The type of advertising can be display copy which describes a product, service, or simply identifies your latest catalog - inviting inquiries. Copy may list maps, atlases, and related materials - stating prices and terms of sale.

Page 2 lists the name, address, phone number of the Editor. Advertise!