

The Mineral Waters and Health Resorts of Indiana:

A Study in Historical Geography

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Introduction

It is the purpose of this paper to describe the growth and decline of the health resorts which made use of the mineral waters in Indiana. Several of these resorts are still in operation. Some have attained national reputation but their status in several instances is rapidly changing. There was a time in the state's history when many more were in existence than at the present. It was thought that a brief review of this once important "industry" might be of interest since its former importance is hardly appreciated by the present generation. This paper may well be called a study in historical geography, for more of the geography involved is of the past than of the present.

Much of the material upon which this paper is based was obtained from various geological reports. Of special value in preparing this paper was Blatchley's¹ report of 1901.

The writer has hunted through the available geological literature for material upon the various parts of the states and, in addition, has during the past summer visited many of the old resort sites and collected from local citizens as much of the history of each as possible. In a few cases exact dates of the operation of resorts were not obtainable, but on the whole the data are rather reliable.

The term mineral water is used in this paper rather loosely, for some of the springs and wells classed as mineral are hardly so in the geological sense of the word. Since they were used for their real or alleged mineral properties no serious error is committed by classing them with the true mineral waters. The term is here applied to all waters developed commercially for their supposed mineral properties.

Early Use of Mineral Waters in Indiana

The use of mineral waters in Indiana antedates the white man, since several of the natural mineral springs of the state were known to and used by the Indians, as well as by the native animals. Numerous salt licks were present in southern Indiana and the buffalo trace which is said to be still discernible in certain parts of southern Indiana was made in part at least by these animals as they sought the salt and minerals from these springs. French Lick owes its name to this fact as does Blue Lick Springs in Clark County.

Among the mineral springs which are said to have been known to and used by the Indians are: the springs at French Lick and West Baden in Orange County; Hazelwood Spring or what was formerly called Elk

¹ Blatchley, W. S., 1901. The Mineral Waters of Indiana, Ann. Rept. Department of Geology and Natural Resources. 26:11-158.

Spring at English, in Crawford County; Indian Springs in Martin County; Blue Lick Springs in Clark County; Ash Iron Springs east of Boonville in Warrick County; and Kickapoo Springs northeast of Attica in Fountain County.

French Lick Springs are probably the oldest known mineral springs in Indiana. The French at Vincennes attempted to establish a salt depot there but it was broken up by the hostile Indians. George Rogers Clark in his Memoirs mentions the springs at French Lick. However, improvements were not made at French Lick until in 1836, when the first hotel was built.

Indian Springs, in Martin County, are said to have been opened as a resort as early as 1814 but such information as is available seems to indicate that no hotel was built there until about 1840; so it appears that French Lick should be given the credit for having the first commercial health resort in Indiana.

Growth of Health Resorts in Indiana

Table I below gives the name, location, date of opening, date of closing, and the geological age of the rocks from which the mineral waters are obtained for 41 localities in Indiana where resorts have been or are operated. Appended to this list are 10 other localities where minor commercial uses of mineral waters were made.

The peak in popularity of the health resort in Indiana was reached during the two decades between 1890-1910. During each of these decades there were in operation in Indiana at least thirty hotels or sanitarium. People came to them by the thousands to drink the water and take the baths. Indiana ranked next to Missouri in the middle west in the number of sanitarium in operation.

During these two decades at many localities promotion schemes were started for the purpose of developing some mineral well or spring which had attained more than local fame. One of the most ambitious of these was the proposed construction of an electric railway from Indianapolis as far south as White Sulphur Well in Crawford County near the Ohio River. Various resorts along this route were to be joined to the main line by spurs. This scheme got as far as having a route surveyed. Another scheme proposed the construction of an electric line west from Louisville, Kentucky via Wyandotte Cave to White Sulphur Well in Crawford County. Neither of these was ever completed. A similar project which was begun was the construction of a spur from the C. M. St. P. Railway line at Cale, in Martin County, to Trinity Springs, by a Mr. Walsh who owned that road. He had torn down the large 360 room hotel which was located at Indian Springs and planned to replace it with a fine structure built of Indiana limestone, but when the water at Indian Springs showed signs of decreasing flow, he changed his plans and decided to build the hotel at Trinity Springs. The grade for the railway was built and some metal laid but the road was never completed. The grade for this proposed road can still be seen. Numerous other examples might be cited but these cases are typical of the enthusiasm which existed at the time regarding the value of mineral wells.

TABLE I

Name	Location	Opened	Closed	Geol. Age of Source Rock
French Lick Springs	French Lick, Orange County	1836	Operating	Mississippian
Indian Springs	Indian Springs, Martin County	1840	1900	Mississippian
Trinity Springs	Trinity Springs, Martin County	1840	1930	Mississippian
West Baden Springs	West Baden Springs, Orange County	1846	Operating	Mississippian
Ash Iron Springs	5 mi. E. of Boonville, Warrick County	1850	1900	Quaternary
Coate's Spring	8 mi. S.W. of Petersburg, Pike County	1867	1915	Pennsylvanian
Samson King Mineral Well	4 mi. W. of Memphis, Clark County	1870	1898	Mississippian
Magnetic Mineral Well	Terre Haute, Vigo County	1875	---	Ordovician
Blair Artesian Well	Michigan City, Porter County	1876	1900	Silurian
Lodi Artesian Well	Silverwood, Fountain County	1880	1885	Silurian
Degonia Springs	Degonia Springs, Warrick County	1880(?)	1933	Quaternary
Hazelwood Sulphur Well	English, Crawford County	1885	1889	Mississippian
White Sulphur Well	English, Crawford County	1886	1913	Mississippian
Martinsville Mineral Wells	Martinsville, Morgan County	1887	Operating	Silurian
Abbott's Magnetic Mineral Well	Ft. Wayne, Allen County	1889	1895(?) Ordovician	
Indiana Mineral Springs (Mudlavia)	Kramet, Warren County	1889	Operating	Quaternary(?)
Spencer Artesian Well	Spencer, Owen County	1890	1897	Silurian
Montezuma Artesian Well	Montezuma, Park County	1890	1900	Silurian
Delphi Artesian Well	Delphi, Carroll County	1893	1898(?) Ordovician	
Spiceland Mineral Springs	Spiceland, Henry County	1893	1913	Quaternary
Columbus Sanitarium Well	Columbus, Bartholomew County	1894	1915(?) Silurian	
Garland Dells Mineral Springs	5 mi. N.W. of Waveland, Montgomery County	1895	Operating	Pennsylvanian
			but not resort	
Gosport Artesian Well	Gosport, Owen County	1895	1901	Silurian
Greenwood Mineral Well	Greenwood, Johnson County	1895	1913	Ordovician
Paoli Sulphur Well	Paoli, Orange County	1896(?)	Still open	Mississippian
			not resort	

Attica Artesian Well	Attica, Fountain County	1898*	1911	Devonian or Silurian
Feece's Mineral Well	4 mi. S.E. of Rochester, Fulton County	before 1900	Prior to 1900	Quaternary
LaSalle Mineral Springs	2 mi. N.E. of Trinity Springs, Martin County	before 1900	1915(?)	Mississippian
Sweet Sulphur Springs	Near Velpen, Pike County	before 1900	----	Pennsylvanian
Fairview Mineral Springs	Near Boonville, Warrick County	before 1900	----	Quaternary
Mt. Jackson Sanitarium Well	Indianapolis, Marion County	1900	Operating	Ordovician
Cartersburg Mineral Springs	Cartersburg, Hendricks County	1900	1912	?
Nashville Artesian Well	Nashville, Brown County	1900	----	Devonian or Silurian
Shelbyville Artesian Well	Shelbyville, Shelby County	1901	----	Ordovician
Hunter Mineral Springs	Kramer, Warren County	1905	1911	Quaternary
Wabash Valley Sanitarium Spring	3 mi. N. of Lafayette, Tippecanoe County	1906	Operating	Quaternary
Kneipps Springs	Rome City, Noble County	1906(?)	Operating	Quaternary
McCormick's Creek Sanitarium	2 mi. S.E. of Spencer, Owen County	----	----	Mississippian
Reid's Mineral Spa	Richmond, Wayne County	1905(?)	1916(?)	Quaternary(?)
White Crane Mineral Springs	Dillsboro, Dearborn County	1911	Still open	St. Peter
Milan Mineral Well	Milan, Ripley County	1920	1927	St. Peter
Places with Minor Improvements				
Paynes Mineral Springs	Clarke County			Farmhouse with baths
Corydon Sulphur Well	Harrison County			Natatorium
Seymour Artesian Well	Jackson County			Bathhouse
Winona Mineral Springs	Winona, Kosciusko County			Bottling Works
Elliott Springs	5 mi. E. of Shoals, Martin County			Farmhouse with baths
Fritzlar Mineral Well	Evansville			Bathhouse
Exchange Mineral Well	Terre Haute			Bathhouse and swimming pool
Kickapoo Magnetic Springs	3 mi. N.E. of Attica			Farmhouse and bathhouse
Rhodes Mineral Springs	Near West Baden			Bathhouse
Lamden Sulphur Springs	Near West Baden			Farmhouse with baths

Figure 1 shows graphically the history of the growth and decline of health resorts in Indiana for the hundred years from 1840 to 1940.

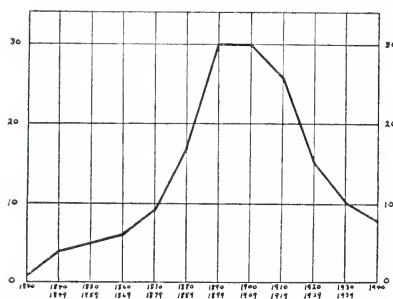


Fig. 1.

Health resorts operating in Indiana by decades from 1840 to 1940.

The data are plotted by decades. It was impossible in several cases to get the exact year in which a resort began operation or closed but it was possible to ascertain this within a year or two of the exact date. Beginning with one resort in 1840 the number increased gradually until about 1875 and then rapidly to its peak during the two decades between 1890 to 1910. During the decade from 1890 to 1899 inclusive there were 30 resorts operating in Indiana. This was true also of the following decade from 1900 to 1909. Beginning about 1915 a rapid decline in numbers set in until in 1940 only eight localities in Indiana had hotels or sanitarium making use of mineral waters.

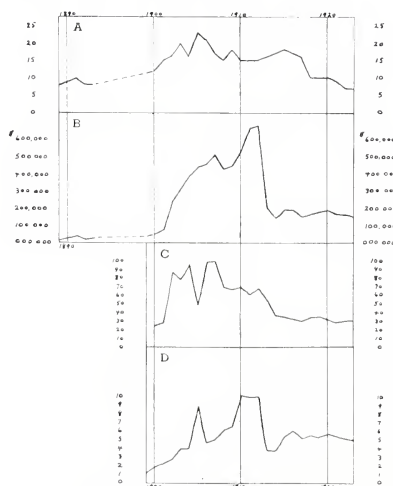


Fig. 2.

(A) Number of commercial mineral wells in Indiana from 1890 to 1923. (B) Value of mineral waters sold in Indiana. (C) Average price per gallon of mineral water sold in Indiana. (D) Millions of gallons of mineral water sold in Indiana.

Figure 1 shows only the number of health resorts operating but Figure 2 gives more details regarding the rise and decline of the mineral water industry. Most of the graphs peak between 1900 and 1915. The graphs which show the values of mineral water sold in Indiana go up rapidly after 1900 due largely to the fact that the large hotels at French Lick and West Baden were built about 1900 and the popularity of their waters for a number of years caused a rapid rise in the value as well as the price received for mineral waters from Indiana.

It is of interest to compare the graphs in Figure 2 with those in Figure 3 which show the history of the mineral water industry in the United States. In general the trends have been much the same, so it appears that the decline which has affected Indiana has been part of a general decline throughout the United States and not a local matter. Data are not available after 1923 on the value of mineral waters produced or the number of commercial mineral springs operating in the United

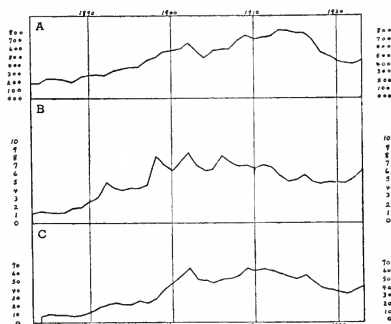


Fig. 3.

(A) Number of commercial mineral springs in the United States. (B) Value of the mineral waters sold in the United States in millions of dollars. (C) Millions of gallons of mineral water sold in the United States.

States. After 1923, the Department of Commerce ceased to publish in the Mineral Yearbook data on mineral waters.

Causes for Decline in Health Resorts

One naturally asks what caused the decline which set in about 1915 in the use of mineral water and health resorts. There were probably several reasons for it. In the first place, the mineral water health resort lost popularity due to the (overly) optimistic claims made for the waters. As a matter of fact at several of the places where sanatoria were built the waters differed in no particular way from ordinary ground water. There is an example of a certain place advertising its waters as "Lithia" waters when analysis showed that there was only one part in a million of lithium in the water. It is true that at most of the localities the waters are strongly mineralized. However, too strong claims were made for many of these waters. It is not uncommon to find them referred to as "having no equal in the state" or in a few instances they were said "to have no equal in the world".

The writer has made a composite list of diseases and disorders which were allegedly cured or benefited by drinking the waters at the various resorts in the state. Following is this list.

Rheumatism, skin disorders, nervous disorders, kidney trouble, gout, neurasthesia, bowel trouble, stomach diseases, dyspepsia, general debility, blood impurities, diabetes, malaria, ague, arthritis, neuritis, neuralgia, lumbago, biliousness, gall bladder trouble, constipation, auto-intoxication, alcoholism, high blood pressure, sleeplessness, hives, eczema, psoriasis, colitis, jaundice, obesity, catarrh, ivy poisoning, ulcers, scrofula, sore eyes, paralysis, and pimples.

If one were to accept seriously the claims made for the mineral waters of Indiana it would seem that there was little left for the doctors to do except to repair broken bones and welcome children into the world. That the use of mineral waters was beneficial in many cases could hardly be denied, but probably the greatest benefit which came from going to one of the health resorts was the rest and relaxation obtained there. Over the baths of Antoninus at Rome, Italy was this inscription:

*"Curae vacuus hunc adeas locum
ut morborum vacuus abire queas."*

"Come to this place free from care that you may leave it free from disease".

This probably expresses the greatest benefit which the health resort offered to its clientele.

A second factor which contributed to the decline of the health resort was the coming of the automobile. It is no accident that the rapid decline in the popularity of the health resort set in about 1915. Automobiles and good roads were just making their appearance. In its heyday, the health resort served not only as a place for sick people to seek relief from their ills but many of the resorts were favorite vacation spots. American life was much more simple and leisurely in the "Gay 90's" than at present. Today fewer and fewer people are content to spend a week or two in one place. Particularly is this true of younger people. The health resort may still have its attraction to the elderly folks who are looking for a place of quiet and rest but it has largely lost its appeal to the younger folks. The simple recreations which most of them offered, such as billiards, croquet, tennis, and bowling are not sufficient to attract our present generation. Vacations today are frequently spent "on the run" rather than in one place. The automobile and good roads have made this possible.

A third factor which has contributed to the decline of the health resort has been the improvement in the quality of doctors. In the eighties, nineties, and even in the first decade of the present century there were many poorly trained physicians whose prescriptions were in many cases less satisfactory than the treatments received at the sanatoria which in many cases retained competent physicians. Medicine has advanced rapidly in the past two or three decades and greater public faith is placed in the local physician. If he can not help, the invalid is more likely to go to a clinic for examination and diagnosis.

Probably another factor contributing to the decline in the use of mineral waters and to some extent to the health resort has been the improvement in the purity of public water supply. A great deal of the water which was bottled and sold was not strongly mineralized and was used as table water rather than as medicinal water. At a few places water is still bottled for such purposes but in the main the public does not have to buy bottled water in order to feel that its drinking water is pure.

Geographical and Geological Distribution

Figure 4 shows the distribution of slightly over 150 of the mineral wells and springs in Indiana. Some of them are no longer flowing, having been allowed to become clogged with mineral deposit or debris. In general they are much more numerous in the southern part of the state than in the northern part. This is due to a considerable degree to the more favorable topographic and geological conditions in southern Indiana. The southern one-third of the state is either not covered with glacial drift or only thinly veneered with Illinoian drift. The geological formations from which mineral waters are obtained are deeply buried under the Wisconsin drift in most parts of central and northern Indiana and mineral waters are obtained mainly by drilling of wells, except where the glacial drift yields mineral water. In the southern part of the state there are many natural springs in addition to wells.

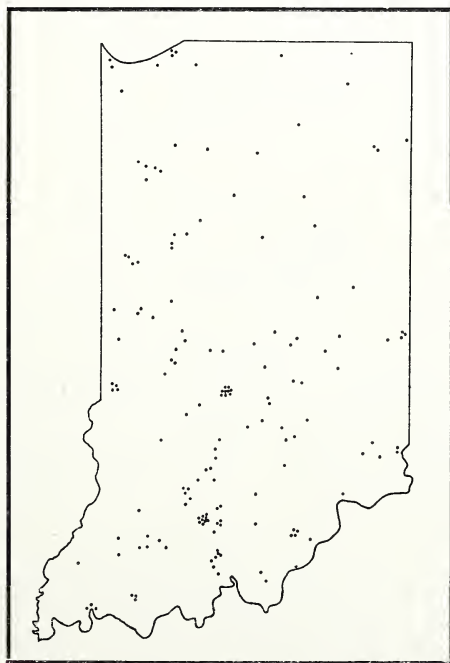


Fig. 4.

Map showing location of mineral wells and springs in Indiana.

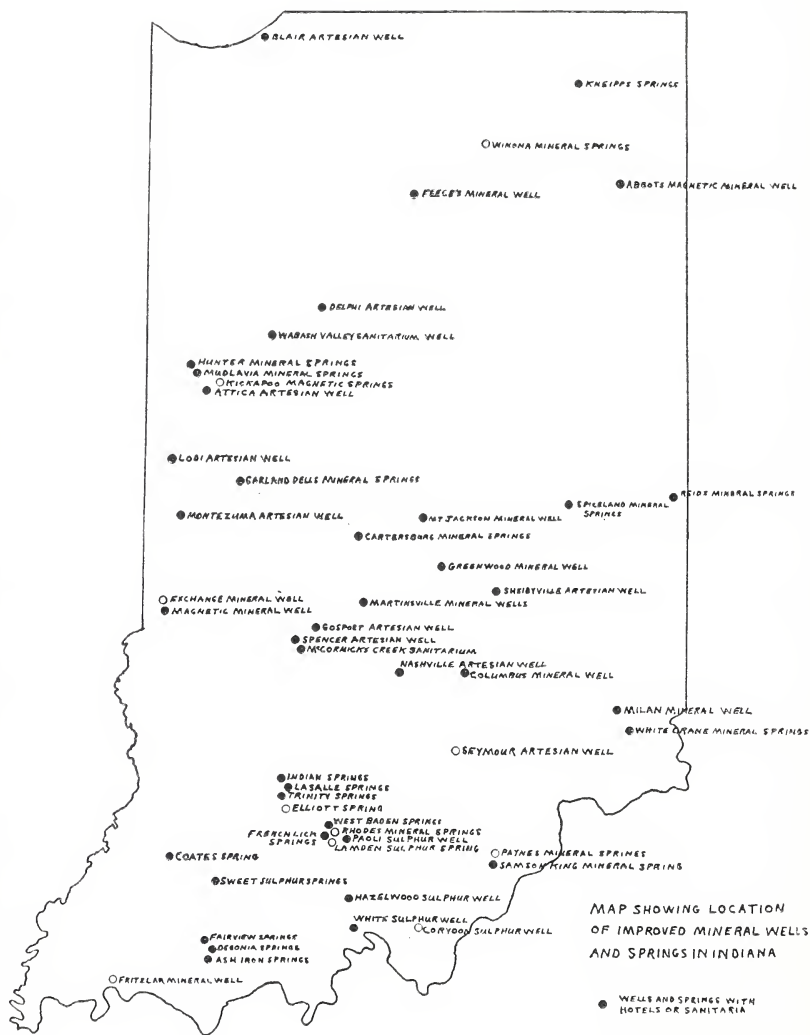


Fig. 5.

Figure 5 shows the distribution in Indiana of the mineral wells and springs which have been used commercially. These are also more common in the southern half of the state. This is partly due to the greater frequency of mineral springs and wells in that section of the state and perhaps in part to the fact that population came into Indiana largely from the south. Hence most of the natural mineral water sites were first developed in that section.

About half of the mineral waters of Indiana come from either natural springs or wells dug or drilled for water, and half from wells which were drilled for oil or gas. The oil and gas boom in Indiana in the eighties and nineties resulted in the discovery of many mineral wells which were later developed commercially for their mineral water. Of the fifty-one localities in Indiana where commercial development of mineral waters took place slightly less than half were discovered in drilling for oil or gas.

The mineral waters come from a wide range of geological formation. Table I gives the age of the geological formations from which the water is obtained at each of the forty-one places in Indiana where health resorts were developed. The exact geological horizon is not determinable in many cases, so it was thought best merely to give the geological age of the source rock. It will be noted from an examination of this table that the various geological systems of rocks present in Indiana rank in the following order: Mississippian, Quaternary (Glacial), Silurian, Ordovician, Pennsylvanian, and Devonian. For all mineral wells and springs in the state the rank is somewhat similar. Of the 150 known mineral wells and springs in the state the approximate geological horizon of the mineral waters was ascertained for ninety-three. Following is the rank of the various geological rock systems in Indiana as producers of mineral waters:

Mississippian	33
Silurian	23
Quaternary (Glacial) . . .	14
Ordovician	11
Pennsylvanian	6
Devonian	6
	—
Total	93

Among the more common geological formations which yield mineral waters are the St. Louis and St. Genevieve limestones of Mississippian age, the Niagaran limestones of Silurian age, the St. Peter sandstone of Ordovician age, the Trenton limestone of Ordovician age, the Borden sandstones of Mississippian age, and glacial gravels of Quaternary age.

Larger Resorts

Space does not allow the discussion of each of the resorts separately but a few of the larger and more famous ones may be mentioned. Among these would be French Lick and West Baden at which hotels of over 700 rooms each were built. (It may be stated parenthetically that the largest hotel at West Baden was given by its owner in 1934 to the Jesuits

who now operate it as West Baden College. Since then the former Homestead Hotel has changed its name and operates now as the West Baden Springs Hotel.) Other sizeable hotels were built at Indian Springs, Milan, Dillsboro, Mudlavia, White Sulphur, Martinsville (at which place seven sanitarium were built), and Kneipp Springs.

Conclusions

While the health resorts in Indiana have had a very illustrious past, their future does not appear very bright. A glance at Figure 1 will lead one to conclude that if the trend of the past two or three decades continues it may not be long until most of them will be gone or changed into some other type of organization. In fact, even now at several of those which are still operating, the mineral waters and baths constitute minor attractions. They are rapidly becoming ordinary hotels or places where excellent cuisine and recreational facilities attract people over week ends or on Sundays and holidays. A few of the smaller places are catering largely to elderly people who wish to seek occasionally a place of quiet and rest away from the strenuous life in the city.