THE ANCIENT WATER SUPPLIES OF BRISTOL.

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ABSTRACT.

BRISTOL may be said to hold a unique position as regards her ancient water supplies, and in addition to their vast importance, they are full of interest, especially to the Bristolian community. It is also much to be questioned if there are any towns in the United Kingdom that possess so many supplies as ancient or of such magnitude.

Bristol can also boast of having hot springs, from which the district of Hotwells takes its name. Although not so high in temperature, the waters possess similar properties to those of the hot springs at Bath. Bristol is also noted as having other springs most famous for their alleged curative properties.

Some of the ancient supplies of Bristol date back to the middle ages, and were, no doubt, first utilized by the friars and monks of that period.

These ancient settlers may have made the question of water supply a part of their religious ceremonies. The cost and labour involved in the completion of these works, in those primitive times, must have been enormous, necessitating the construction of large conduits, subterranean passages, and the laying of lead pipes some considerable distances.

Originally there were seven ancient water supplies to this city, distributed over different areas, each parish supplying its own religious houses first. Documentary evidence, however, proves that any surplus water not required for themselves was allowed, under certain conditions, to be taken by the adjoining parishioners. Disputes appear to have occasionally arisen as to right of usage, but there was never a military struggle for the possession of the springs, such as we read of in Biblical history.

On suppression of the monasteries the maintenance of these ancient

supplies was vested in the various churchwardens, who charged a tax on the owners of properties using the supplies; but on the foundation of the Bristol Water Works Company in 1846, these taxes were suppressed. Notwithstanding that legacies were left for the up-keep of some of these supplies, they have been neglected in recent years, and consequently not much used for domestic or other purposes.

During the water famine at Bristol in 1864 these ancient supplies were again fully utilized, and were augmented by the Corporation fixing pumps to some of the old wells in different parts of the town.

REDCLIFF SPRING AND PIPE.

This is considered to be the oldest of these springs. It was originally the property of Lord Robert de Berkeley, who, in 1207, granted to the churchwardens of St. Mary's, Redcliff, the free use of this spring for the good of the parishioners.

This spring is near Gay's farm and cottages, Knowle, rises through the Lias formation, and is about sixteen feet from the surface; it can be approached by a manhole. The water was conveyed originally by two-inch lead pipes through land and many streets, and discharged into a tank at the corner of Redcliff Hill and Colston Parade. The length of conduits and pipes is about one and a half miles.

Originally the water of this spring was abundant in quantity, of excellent purity, and was largely used by the parishioners. St. John's Hospital, Guinea Street, now Camden Terrace, was by arrangement supplied from this source.

ST. JOHN'S SPRING AND PIPE.

This historic and famous supply of water is the property of the churchwardens of St. John's the Baptist, but, by agreement, is now maintained by the corporation.

This supply is obtained by two springs, one on the north-eastern side of Brandon Hill, and the other from the top of Park Street. The springs rise through the Millstone Grit and are approached by manholes and subterranean passages of considerable length, well constructed and arched over; these were originally open conduits. The water is conveyed by two-inch lead pipes, under many houses and streets, discharging into a tank at the end of St. John's Church, Nelson Street. The length of conduits and pipes is about three-quarters of a mile.

The source of supply is at the present time abundant in quantity and fairly pure. It is well suited for domestic or other purposes.

ALL HALLOWS AND ALL SAINTS SPRING.

This spring rises from the New Red sandstone in an orchard originally belonging to the Priory of St. James, on the south-eastern side of Kingsdown and Maudlin Street.

It was first utilised in the thirteenth century, and in the fourteenth century the free use of it was granted to the parishioners of All Saints by the Grand Prior and Proctor of St. James.

The spring is approached by manholes and subterranean passages, similar in every respect to St. John's spring. The water is conveyed through many streets and under houses by two-inch lead pipes to a tank in All Saints' Lane, near All Saints' Church. The length of conduits and pipes is about three-quarters of a mile.

This source of supply was originally abundant in quantity and of fair purity, but is not now much used for domestic purposes.

JACOB'S WELLS SPRINGS.

There are two springs, both on the north-eastern side of Jacob's Wells, rising through the Millstone Grit.

These springs were undoubtedly utilised in the thirteenth century by the monks of St. Augustine's, now the Cathedral, perhaps before or during the reign of Edward III. They were specially visited by the Bishop of Worcester in 1320, and some mention is made of Woodwell Lake, which originally received the overflow from these springs.

The two springs were separate properties, one belonged to the Corporation and the other to the Dean and Chapter, and they underwent many changes, especially during the Cromwellian period. The Bishop's palace and adjoining buildings were converted into a malthouse and brewery.

The water was conveyed originally by two lead pipes, and discharged into two storage tanks, one near the Cathedral and the other in Unity Street; the latter also supplied the old Grammar School and Gaunt's Hospital, now the Redmaids School.

These springs supplied all the houses in the area of St. Augustine's. The water was always abundant in quantity, of exceptional purity, and well suited for all purposes. Their use at the present time is confined to supplying the new baths and wash-house in Jacob's Wells.

The length of conduit and pipe is about a mile.

BOILING WELLS SPRINGS.

There are really two springs which rise through the New Red sandstone

near Ashley Hill station, where the waters rise up under hydraulic pressure, and are called the Boiling Wells.

These springs were first utilised in the fourteenth century, and taken possession of in the sixteenth century by the Corporation, who keep them in repair.

One of them supplies the Quay head tap at the corner of St. Stephen Street and Broad Quay where the storage tank is situated. The other is now used by the Bristol United Brewery Company at their brewery in St. Paul's.

In the early days these springs were extensively used although the water was extremely hard; it was always fairly pure and abundant. Its use at the present time is principally confined to shipping and to premises of the warehouse class.

The two lead pipes passed through several streets and under many houses to the storage tank. The length of pipe, which at the present time is composed of 3-in. lead and iron pipes, is about two miles.

During the water famine at Bristol in 1864 a special grant was given to the Water Works Company to use these springs; the water was pumped, and supplied the district of Montpelier.

TEMPLE CONDUIT OR RAVEN'S WELL AND PIPE.

This spring rises through the Lias at Pylle Hill, Totterdown, and was originally the property of Sir John de Gourney, Lord of Knowle, who in 1566 granted to the inhabitants of the parish of Temple the right of conveying the water by conduits and pipes close to a friary of Hermit Brothers, Temple Gate. The water was afterwards conveyed to a tank near Temple Church tower, which also at one time supplied the present historic Neptune Fountain when it stood near the church.

The spring is approached by manholes and subterranean passages. The conduit is partly constructed of stone, earthenware, iron, and lead pipes which pass under many houses and streets, and is about a mile long.

The water originally was very pure, abundant, and well suited for all purposes; but, like all the other ancient supplies, the good qualities have been much affected by the construction of new streets, sewers and drains. This water at the present time is only used for trade purposes.

ST. THOMAS' PIPE.

The supply to this pipe is really an overflow from the tank at Redcliff Church, which was granted in the fifteenth century to the churchwardens

of St. Thomas, under stringent conditions and by the paying of a tax of twelve pence per year.

The lead pipe is about half a mile in length, and the tap, which was surmounted by a fine canopy, originally stood in the middle of Thomas Street. It was afterwards removed and two taps fixed in Thomas Lane, one of which was also removed recently; the supply of water at present is very limited in amount.

ST. NICHOLAS' PIPE.

This tap and canopy was on the north-western corner of Bristol Bridge. The water was famous for its good qualities, and extensively used for shipping. The tap was removed in 1762, when the old bridge, with its pile of houses, and old St. Nicholas' Church and gate were taken down.

FAMOUS SPRINGS.

Bristol was noted for its famous springs, and the more important of them are St. Vincent's Hot Springs, near Cumberland Basin; Zion Spring, Clifton Rock Hotel, Zion Hill; Richmond Spring, Richmond Spring Hotel, Gordon Road; Mother Pugsley's Well, on the north-eastern side of Kingsdown. These, in addition to their historical pedigree, possessed excellent curative properties, and were extensively used in the early days for all purposes.

EARLY WATER WORKS.

The earliest mention of a water works company being established in Bristol was in 1695, and in 1696 the company received the Royal assent to construct works, lay mains, and charge a water-rate on all houses using the water.

The source of supply was at Hanham Mills. The water was conveyed to Crew's Hole, and pumped by a very primitive engine to a tank on Lawrence Hill. It was then conveyed to the city by pipes of elm. Some of these pipes have recently been found, and a specimen is in one of the Municipal authority's depots.

These works were completed at a cost of £7,000, but were abolished in 1700.

The present Bristol Water Works were founded in 1846, and great praise is due to the Company for its enterprise.