# PLUMBING & SANITATION
## FROM EARLIEST TIMES

# *Rome and Frontinus*

# From THE WATERS OF ROME
# H V Morton,  The Connoisseur & Michael Joseph, 1966

# II

# THE AQUEDUCTS OF ANCIENT ROME

THE ROMANS had no other water but that of springs, wells and the Tiber for the first four and a half centuries of their existence. The springs were numerous and some of them still flow under modern Rome as may be seen, and heard, in the Mithraic temple beneath the church of S. Clemente, which lies in the path of a subterranean stream. The most famous of the springs was the Fountain of the Camenae, which rose in a sacred grove just outside the old Porta Capena. The Camenae were a mysterious group of water spirits or nymphs who decided to befriend the young community and to guide it with their divine knowledge.

In the legendary prelude to Roman history, the warlike Romulus was succeeded by the peaceful and pious Numa Pompilius, who fell in love with a Camena named Egeria. Thirty-nine years of happy and constructive peace under a king wedded to a fountain goddess were explained by the story that Numa was divinely guided. It was said that he visited the sacred grove by night, when his Egeria would give him the advice which he later passed on to his people as law. Thus from the first of the fountains of Rome emerged the beginnings of Roman religion and law, though I wonder what a lawyer would say to a student who ventured to suggest that the mighty structure of Roman Law originated in water. However, the story of Numa and Egeria gives point and charm to the phrase, "the Fountain of the Law".

For centuries the fountain of the Camenae was the scene of a daily ceremony when the Vestal Virgins, who were forbidden to use water that had passed through pipes, came to the grove to fill their archaic water pots. These were shaped so that they could not be rested without spilling the water, a precaution taken to prevent contamination with the earth. It is not known for how long this ancient custom was observed, but Juvenal, writing about A.D. 100, said that in his time the grove was no longer venerated and was haunted by the poorest class of Jews with their baskets and bales of straw. It has been supposed that in later times the Vestals drew their water from the more convenient spring of

Juturna, whose remains are to be seen only a few paces from the House of the Vestal Virgins in the Forum Romanum.

Cities expand in proportion to their water supply, and as Rome developed and increased in population the springs and wells were no longer adequate. How curious it is that the words "writ in water" should be used sometimes to suggest something fleeting and ephemeral - as the dying Keats, for example, said that his name was "writ in water" - whereas water is necessary to permanence; indeed, all history might be said to be written in water since, lacking it, no life is possible.

Rome's problem of finding additional water was faced for the first time during the Censorship of Appius Claudius Caecus and Gaius Plautius in 312 B.C. It was the procedure in ancient Rome for public works approved by the Senate to be entrusted to the two Censors during their eighteen months of office. They had the task of employing the contractors and of supervising the construction; as a reward, they were often allowed the prized privilege of giving their names to the works they had directed. Plautius, entrusted with the task of finding the new water supply, discovered some springs about ten miles to the east of Rome; Appius Claudius, who was already supervising the Appian Way, was responsible for the aqueduct. However, the work was not completed when the time came for the Censors to resign. Plautius retired as he was required to do by law, but Appius Claudius was so determined to give his name to the aqueduct that he refused to resign and continued to remain in office, arguing that the *Lex Aemilia*, which limited the power of the Censors, did not apply to him. The moment the aqueduct was built and he had made certain that it would be called the Aqua Appia, he resigned. For most of its ten miles the Aqua Appia was buried underground in a channel of cut stone. Only when it had entered Rome was it lifted upon arches.

By A.D. 226, when the last of Rome's aqueducts was built, eleven aqueducts poured the water of springs, a river and a lake into the city. Nothing like this abundance of water had ever been seen, and it has never since been exceeded. It was, of course, out of all proportion to the actual needs of the population because many of the aqueducts were built purely to minister to the astonishing Cult of the Bath.

The aqueducts built after the Aqua Appia, in chronological order, were:

*Aqua Anio Vetus*, built in 272–269 B.C. This aqueduct was forty miles long and brought water from the Anio river (now the Aniene), near Vicovaro, east of Rome. Like its predecessor, it was an underground channel of cut stone.

*Aqua Marcia*, built in 144–140 B.C., by Quintus Marcius Rex, of whom nothing is known except that his *imperium* as Praetor was extended for a year that he might finish and give his name to the work. The length of the aqueduct was slightly more than fifty-six miles, and its source was a group of springs near Subiaco, east of Rome. For fifty miles the water flowed in an underground channel, then, as it approached Rome, it was mounted upon six miles of arches. Its terminus was the Capitoline Hill, and it was later piped to the Caelian, the Aventine, and the Quirinal hills.

*Aqua Tepula*, built in 125 B.C. This was eleven miles long and brought spring water from the Alban Hills. For five miles the aqueduct was underground and then for six miles it rode into Rome on top of the Aqua Marcia, both aqueducts using the same arches.

*Aqua Julia*, built in 33 B.C. This was the first of two aqueducts constructed by Marcus Agrippa, the friend and son-in-law of Augustus (Gaius Julius Octavianus), and named "Julia" in his honour. It was fourteen miles long, half underground and half carried into Rome on top of the Marcia and the Tepula. Thus three aqueducts entered the city one on top of the other. The water of the Julia came from springs east of Rome, not far from the source of the Tepula.

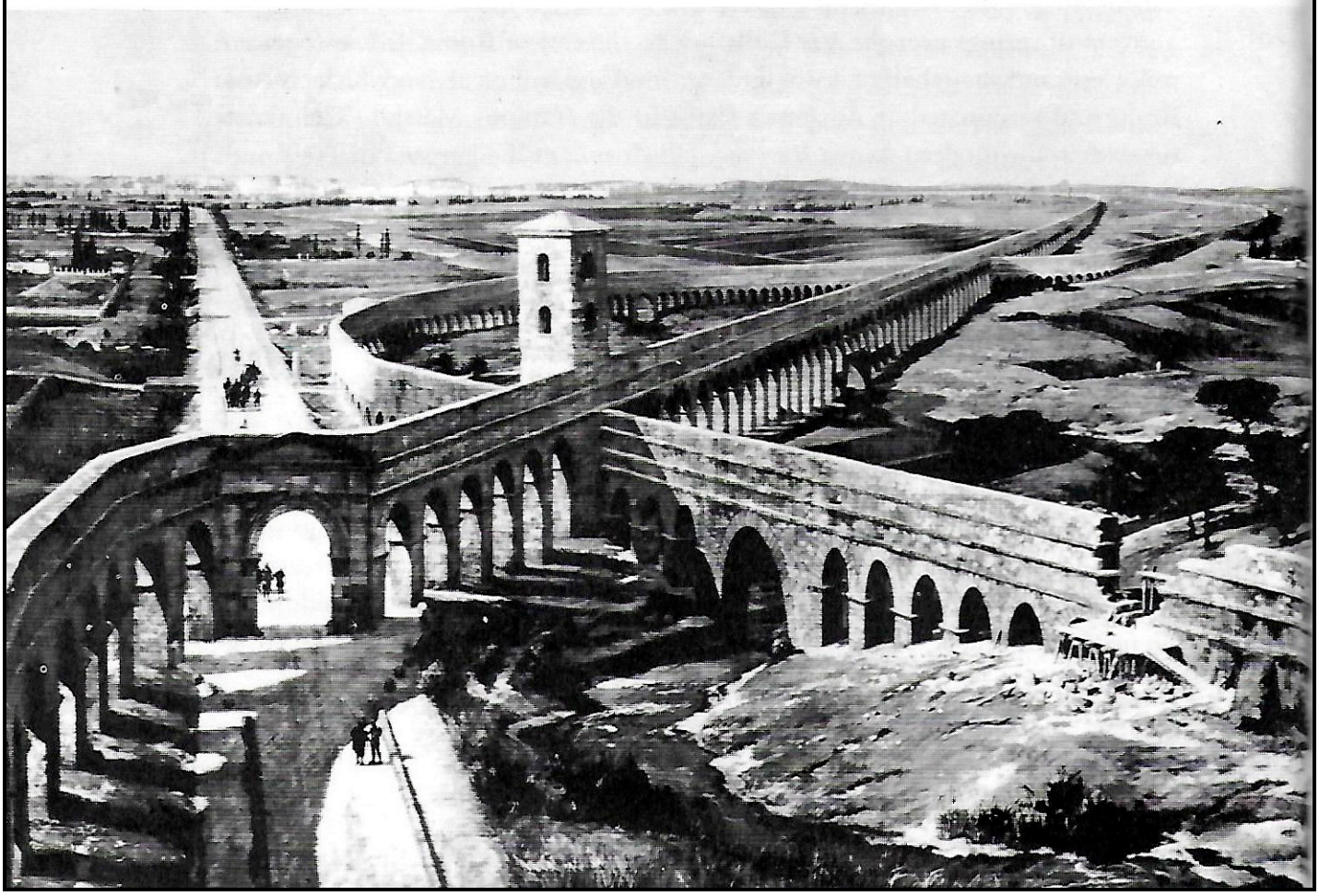
*Aqua Virgo*, the second aqueduct built by Marcus Agrippa, in 19 B.C. It was called "Virgo" because a young girl is said to have led the military engineers to a group of springs near the Via Collatina, to the east of Rome. It was fourteen miles long and about half of it was underground and half on arches which crossed Rome and terminated at Agrippa's Baths in the Campus Martius. The name survives in the modern Acqua Vergine, which ends at the Fontana di Trevi and is still one of the principal aqueducts.

*Aqua Alsietina*, built in 2 B.C. by Augustus. It was twenty miles long and brought water from Lake Alsietina, now Lake Martignano, to the east of Lake Bracciano, north-west of Rome. It was one of two aqueducts that came from the north-west: the other was the Aqua Trajana. The water of the Alsietina was of poor quality and was brought to Rome by Augustus to flood his theatre on the Janiculum, where mock naval battles were staged.

*Aqua Claudia*, built in A.D. 52, and named after the Emperor Claudius, who completed it. It was forty-three miles long and only a little more than nine miles were on arches when it approached Rome. The water came from springs near Subiaco, east of Rome, and terminated on the Caelian Hill. It was later carried to the Palatine Hill and was piped to the imperial palaces from the middle of the first century. The Porta Maggiore, which still stands and is one of the most

*Above* Ruins of an aqueduct near Rome, half its arches buried in the earth

*Below* A reconstruction of ancient aqueducts outside Rome at the point known as Campus Barbaricus, not far from the modern Cinecittà. The straight road leading to Rome is the Via Latina. The aqueduct which is twice crossed by the curve of the right-hand aqueduct carries the Aqua Claudia and the Aqua Anio Novus; the right-hand aqueduct carries the Marcia, Tepula, and Julia. The section on the extreme right shows how the aqueducts flowed one above another



impressive relics of the ancient aqueducts, was built to carry the Aqua Claudia into Rome.

*Aqua Anio Novus*, the companion aqueduct to the Aqua Claudia, and also completed by Claudius in A.D. 52. It was fifty-four miles long, and, as the water came from the Anio river, east of Rome, the aqueduct was called "the new Anio" to distinguish it from the ancient Anio Vetus of 269 B.C. It travelled upon arches for only eight of its fifty-four miles, entering Rome on the Porta Maggiore, on top of the channel of the Claudia. These two channels can still be seen above the three arches of the Porta Maggiore.

*Aqua Trajana*, built by the Emperor Trajan in A.D. 109. It was thirty-five miles long and mostly underground. Like the Alsietina, it came from the north-west and brought to Rome the water of a number of springs grouped to the north of Lake Bracciano. Like the Alsietina, it terminated on the Janiculum.

*Aqua Alexandrina*, built by the Emperor Alexander Severus in A.D. 226. It was about fourteen miles long and its sources were springs to the east of Rome in the marshland near the Via Prenestina. The Emperor built this aqueduct to supply his Baths, the Thermae Alexandrianae, which were on the Campus Martius, near the Pantheon.

At the time of the first Gothic sack of Rome in A.D. 410 the eleven aqueducts were feeding 1,212 public fountains, 11 great imperial *thermae*, and 926 public baths. Never before had a city known such a display of water. The Elder Pliny, who saw the system in operation, wrote: "But if anyone will note the abundance of water skilfully brought into the city, for public uses, for baths, for public basins, for houses, runnels, suburban gardens, and villas; if he will note the high aqueducts required for maintaining the proper elevation; the mountains which had to be pierced for the same reason; and the valleys it was necessary to fill up; he will consider that the whole terrestrial orb offers nothing more marvellous." Strabo echoed this tribute with: "And water is brought into the city in such quantity that veritable rivers flow through the city and the sewers; and almost every house has cisterns, and service pipes and copious fountains." Galen, the Greek doctor who saw Rome about the year A.D. 164, wrote: "The beauty and number of Rome's fountains is wonderful. None emits water that is foul, mineralized, turbid, hard or cold."

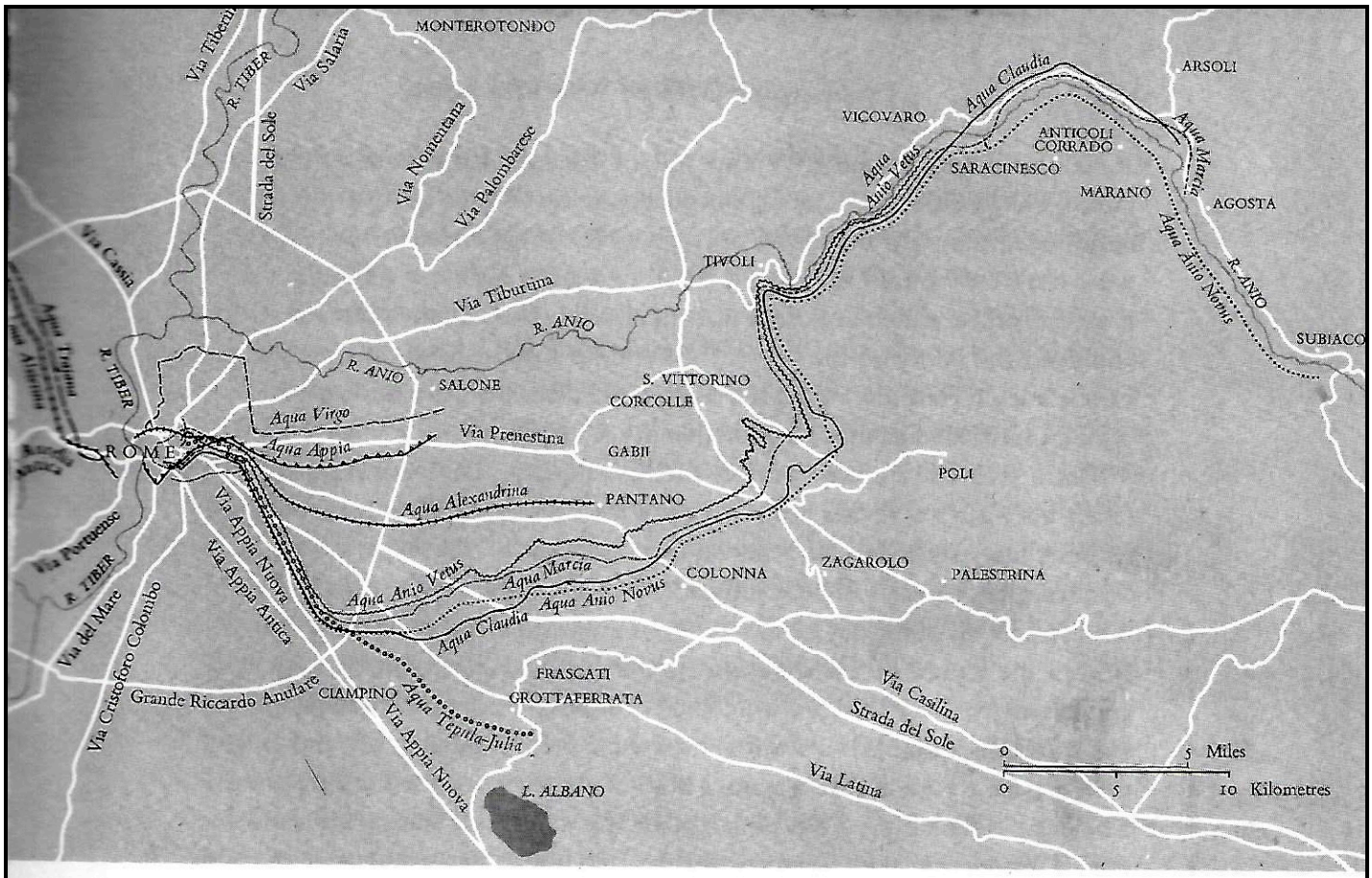
All trace of this triumph of hydraulic engineering vanished during the barbarian invasions, save for the ruins of some of the baths and fountains and of the aqueducts as they strode towards Rome across the Campagna: the methods employed by the Romans to control and circulate the immense volume of water

that flowed in day and night became a mystery for a thousand years. Then, in 1429, the scholar and humanist, Poggio Bracciolini, who had found many lost Latin classics, made a great discovery. He found in the library of the Benedictine monastery of Monte Cassino a copy of a work written about A.D. 97 describing the aqueducts and their administration, and also the system of distributing water to public and private consumers in ancient Rome. The title of the book was *De aquis urbis Romae*, and the author was Sextus Julius Frontinus, who was the chief commissioner for water in the reigns of Nerva and Trajan.

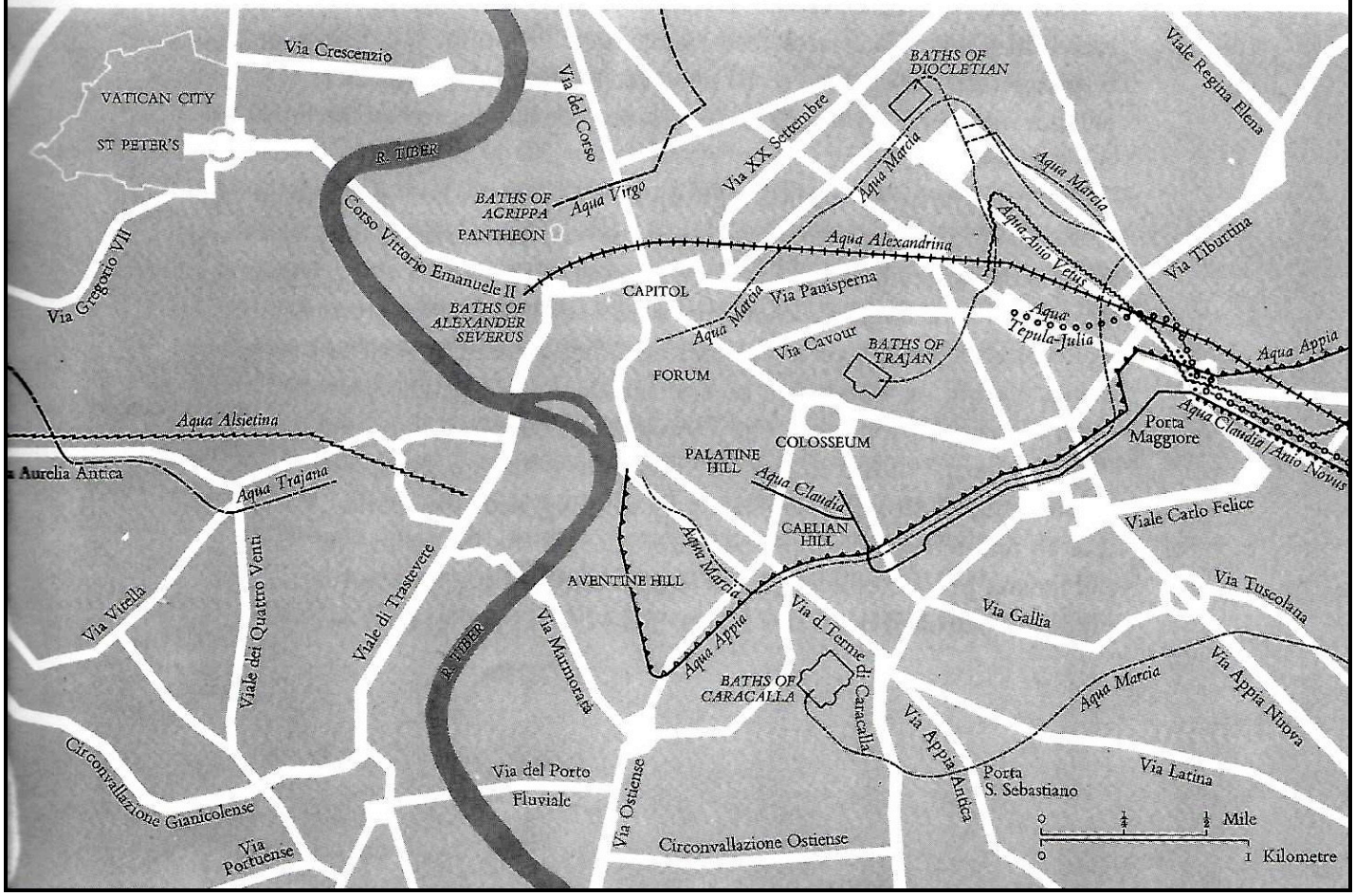
The resurrection of an unknown work by a distinguished writer who was also an historical character mentioned by Tacitus, Pliny, and Martial, was an event of more than scholarly interest: the Roman commissioner had returned to life at the precise moment when, after a retirement of some thirteen centuries, he was able to reassert his influence on the restored water system of Renaissance Rome. I do not know if there is another instance of a technical adviser to the Caesars who was able to act after many centuries in the same capacity to the Popes. It has been said that his book, *De aquis*, "will always remain the starting point for any investigation pertaining to the water supply of ancient Rome".

Certainly no account of the fountains of Rome would seem adequate without some description of Frontinus, his career and his book; and what is known of him is of unusual interest. Most scholars agree that he was born about A.D. 35, in the reign of Tiberius, and some think that he may have been educated in Alexandria, the New York of the first century. That he was a Roman aristocrat is suggested by his rapid advance along the *cursus honorum*, and his appointment to positions of dignity and authority in the State. In the reign of Vespasian, when he was thirty-nine, he was sent to Britain as Governor, where his task during his four years of office was the subjugation of the Silures of South Wales. It was not his policy to exterminate the tribes but, having conquered them, to build new towns for them, and to romanize them. This was a contrast to the methods employed by his successor, Agricola, who massacred the northern Welsh without a touch of compassion. The steps of Frontinus in South Wales are marked by Roman forts and hill camps, notably Brecon Gaer, three miles west of Brecon, where the *praetorium*, which may well have been his headquarters, was uncovered in 1924–5. Other relics of his campaigns are the Coelbren and Neath forts in Glamorganshire, both recently excavated; and a road in the same country, the Via Julia, which was named after him.

Even without *De aquis*, the magnanimity displayed by Frontinus in Wales would have commended his character to us, but he reveals himself in his book as




The routes of the eleven aqueducts of ancient Rome



a man of inflexible integrity and full of the old Roman moral qualities; of *virtus*. The position of Chief Commissioner for Water (one, as he charmingly comments, that was bestowed only upon the most eminent men in the State), was conferred on him in A.D. 97, when he was in his early sixties. He described it as "an office which concerns not merely the convenience but also the health and even the safety of the City . . . therefore I deem it of the first and greatest importance to familiarize myself with the business I have undertaken, a policy which I have always made a principle in other affairs".

There was also another reason for his enquiry. The water department had fallen into bad ways and was riddled with dishonesty. Frontinus was resolved to put things right but, as a newcomer ignorant of the department, he wisely decided, first, to learn all he could and write down the facts to clarify the situation in his mind. In doing so, he has given us an unusual experience: he has taken us behind the scenes of an important government department of ancient Rome, and has shown how things worked and how they were prevented from working. His treatise is a rare glimpse into an obscure field of ancient life and custom.

When he wrote in A.D. 97, only nine of the eleven aqueducts had been built. The head office of the water department was called the Statio Aquarum and was staffed by clerks, who were probably freedmen. Frontinus was the Curator Aquarum and he had two officials to assist him, both of senatorial rank, the Procurator Aquarum and the Tribunus Aquarum. There was a staff of scribes, technical advisers and architects, and when Frontinus left Rome on tours of inspection he was entitled to be preceded by lictors, though he says that he dispensed with them as unnecessary, trusting to the dignity of his office to clear the way for him.

The head office controlled a group of some seven hundred workers known as the *familia*, a grand old Roman term which has survived only in its original sense in the Vatican, where the Pope's household is known as the *familia*. Among the members of the *familia aquarum* were water inspectors, plumbers, plasterers, stone-masons, bricklayers, and various other artisans as well as two groups of slaves, *aquarii*, or watermen, several hundred strong, who patrolled the aqueducts under their foremen. They also stopped leakages, uprooted trees from the "reserved strip" of fifteen feet on either side of the aqueduct, carried out general repairs and, in Rome, maintained the settling and distributing tanks and saw that an uninterrupted supply of water reached the fountains, the Baths and the public and private buildings. The *aquarii* also laid the lead and terracotta water pipes and patrolled the water mains. Tons of lead piping have been found in the

ruins of Rome, much of it from Britain, which extended in a labyrinth beneath the streets, branching from the mains as in a modern city. An improvement on modern practice was the size of some of the mains which were large enough for men to enter and make their repairs without tearing up the pavement.

The popular conception of a Roman aqueduct is that of a water channel carried upon lofty arches, but Frontinus tells us that the channels were underground for most of the way and upon arches as rarely as possible, and only as they approached Rome. They were, in fact, modelled on the sewers. The total length of the aqueducts administered by Frontinus was approximately 270 miles, and of these only about 40 were above ground. The channels were lined with a special hydraulic cement whose composition is given by Vitruvius. Each aqueduct had frequent inspection points, since it was not only essential to be able to reach underground storm damage quickly but, as everyone knows who has had a bath in Rome, the water is hard and the deposits of carbonate of lime had to be cleaned out at frequent intervals. The brilliant idea occurred to the archaeologist Lanciani in the last century that the removal of mineral incrustation over centuries must have created dumps of lime at regular places along the lost routes of the aqueducts, and, setting himself to discover these dumps, he found, as he had expected, the underground aqueducts nearby.

Another popular belief is that the aqueducts were an efficient triumph of Roman engineering genius, whereas it is clear from Frontinus that they all leaked like sieves. Among literary references to the leakages are references by Juvenal and Martial to the moist drops that descended from the Aqua Marcia as it passed above the Porta Capena, but they were nothing compared with the serious leakages along the length of the aqueducts, some due to accident, some to deliberate punctures which the watermen had been bribed to make by landowners. "The public watercourses are actually brought to a standstill", wrote Frontinus, "by private citizens just to water their gardens." How one can sense and sympathize with the indignation of the new Curator Aquarum, yet how one's heart goes out to those ancient Romans who were trying to keep their gardens alive during the heat of summer!

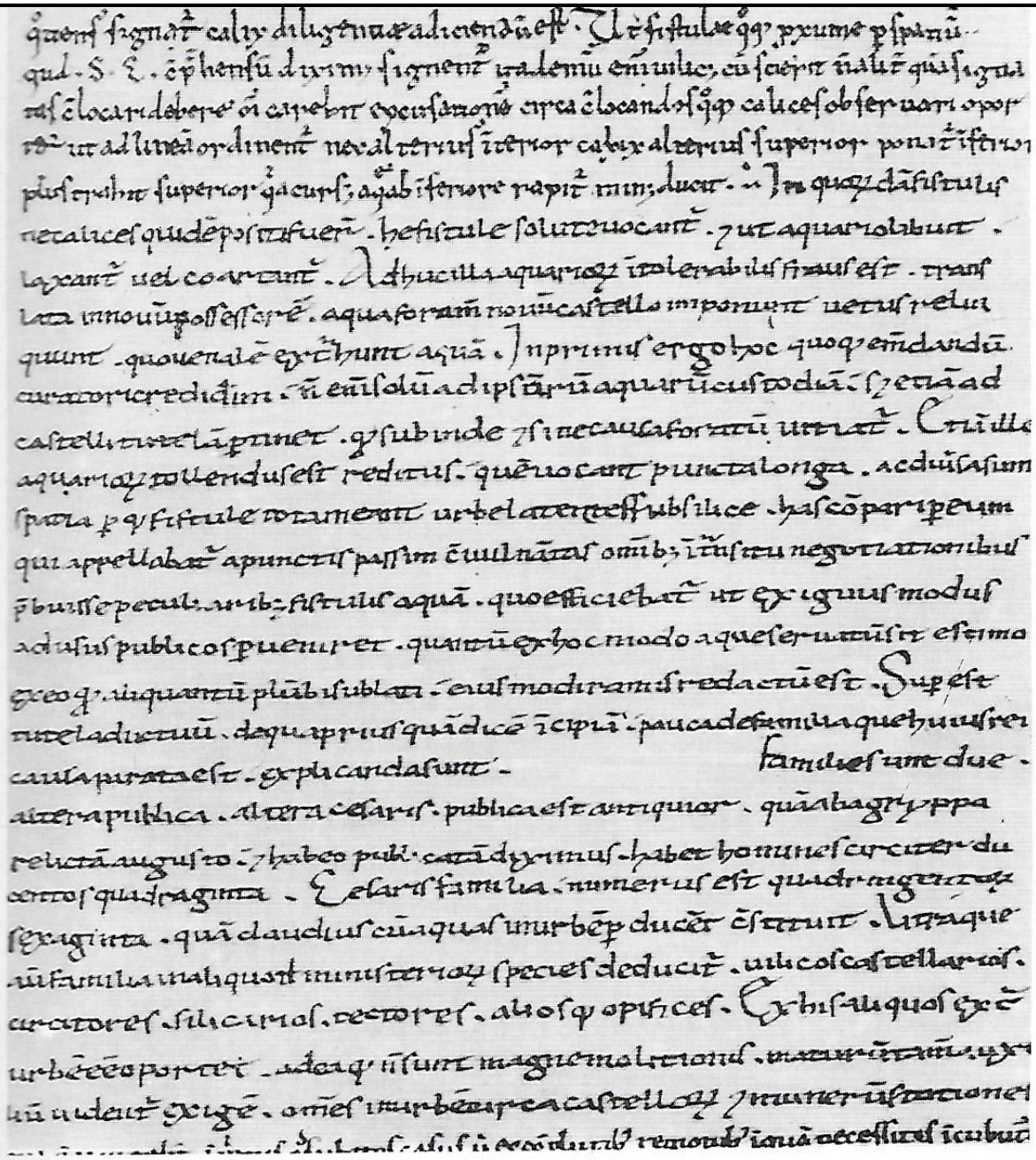
Repairs were constant, and they often involved a regional water shortage in Rome. The same thing happens today, as anyone who has stayed any length of time there is aware, the reason being, of course, that the modern system is a copy of the old one. The underground portions of the aqueducts gave less trouble than the archways. The arches were not only vulnerable to storm damage and the weather, but also, one learns with some surprise, since those wonderful

constructions impress us with their massive strength, were sometimes made of shoddy materials and were the work of dishonest contractors. The perpetual leakage needed constant attention and the Romans had devised a method of repairing an overhead channel without interrupting the flow of water. This was to clamp a bypass of thick lead at both sides of a fault and so to short-circuit the water, leaving the damaged section dry.

Frontinus mentions one or two curious facts about the water laws. Theoretically all water was the gift of the emperor, who granted it to public bodies and to private individuals who, of course, paid a water rate in return. Land carried with it no water rights, and grants of water expired with the owner of the property, whose successors had to apply for a new grant within thirty days, otherwise the water was cut off. Even leakage water was subject to the imperial permission. One recalls Martial's application to Domitian for a grant of water, in the course of which he explained that water was not laid on to the house on the Quirinal Hill where he lived, and that he was tantalized by the sound of Aqua Marcia bubbling up in a nearby fountain. Of course, such applications were never seen by the emperor: they went automatically to the Statio Aquarum and, reading Frontinus, one has the impression that probably the poet might have achieved his wish more rapidly had he disregarded the usual channels and bribed the local *aquarius* instead.

The water flowed through the aqueducts by gravity, but, had the Romans been able to manufacture cast-iron pipes, they probably knew enough about hydrostatics to have delivered water under pressure. They were familiar with the law that water finds its own level, and they understood the inverted siphon. They soon lifted water on lofty arches to the highest points in Rome. The first of the Seven Hills to receive water from an aqueduct was the Capitoline, which in 140 B.C. received the cool spring water of the Aqua Marcia; branches were eventually extended to the other hills.

Each aqueduct delivered its water to a terminal *castellum*, a word borrowed from the legionary engineers, which in its aqueous connection is often translated misleadingly as "reservoir", but that is exactly what the *castellum* was not: "settling tank" or "distribution point" would be a better rendering of this word as it relates to Rome's water. An aqueduct had numerous *castella* and the chief was invariably an impressive fountain with an inscription, while behind the scenes a maze of pipes carried the water to the fountains, the Baths, the public buildings, and the ground floors of private houses. Still moving, the water flowed on to flush the sewers and eventually to discharge itself into the Tiber.



A passage from the Monte Cassino manuscript of *De aquis urbis Romae* by Frontinus

When Frontinus took over the Statio Aquarum the first thing he wished to know was the amount of water that was lost in transit. Accordingly, he measured the water at the sources as it entered the aqueducts, and again as it was delivered in Rome. Though a modern hydraulic engineer might question his method of measuring water, and possibly his mathematics, Frontinus satisfied himself that an enormous discrepancy existed, and he set himself to find the reason why. In doing so he uncovered an old-established system of fraud, which he divided into fraud committed outside Rome and fraud committed in Rome. The chief culprits were the *aquarii*, who were mostly slaves who were probably saving up to

buy their freedom. In the country it was not difficult to bribe the *aquarius* to forget to repair a leak, and even, maybe, to enlarge it; but in Rome a more complex system of fraud was literally uncovered, for it lay beneath the pavements and was hidden in the *castella*.

Frontinus discovered that the outflow pipes in the delivery tanks had been tampered with so successfully that many consumers were not receiving their correct allowance of water, a proportion having been drawn off by the insertion of illegal pipes and sold to unauthorized persons by the watermen. He also found that when a water right had lapsed and had been renewed to a new consumer, the watermen had sometimes put in a new supply pipe without removing the old one, which water again was sold. They had also found that by altering the position of the outlet pipes, or their angle in the delivery tanks, they could increase or decrease the volume of water that flowed out, of course to their own profit. The sad story was repeated under the pavements. "There are extensive areas in various places where secret pipes run under the pavements all over the City", wrote Frontinus. "I discovered that these pipes were furnishing water by special branches to all those engaged in business in those localities through which the pipes ran, being bored for that purpose here and there by the so-called 'puncturers'; whence it came to pass that only a small quantity of water reached the places of public supply. How large an amount of water has been stolen in this manner, I estimate by means of the fact that a considerable quantity of lead has been brought in by the removal of that kind of branch pipe."

Having opened the pavements and torn out the offending pipes, Frontinus then ordered that every water pipe must be stamped with the amount of water it was entitled to deliver and the name of the grantee, and that all pipes must be set at the same level in the distribution tanks. He also tightened up the administration of the public fountains, which it seems may have been tapped by night, and in other ways made it more difficult for members of the *familia aquarum* to earn the odd denarius. At last he was able to declare that he had almost doubled Rome's water supply. "Not even the waste water is lost," he wrote, "the appearance of the City is clean and altered; the air is purer; and the causes of the unwholesome atmosphere which gave the air of the City so bad a name with the ancients, are now removed."

A last glimpse of Frontinus was given in an epigram which Martial addressed to him. The old administrator, then in his seventies, had retired to the sea-coast near Baiae, where he spent his time in the delicious climate cultivating the Muses, as the poet put it. Poor Martial had to have his usual grumble. "Here

am I, tossed about in the vortex of the City," he wrote, contrasting his own depressing fate with that of his friend, "my life wasted in laborious nothingness. . . . By all the gods, I swear I love thee." And one can well believe that the tough old man was lovable: a man who had subdued South Wales (which no one has been able to do since), and also the watermen of Rome.

Oddly enough, *De aquis* has been cold-shouldered by scholars, presumably because of its technicalities, and it appears likely that there might have been no translations into modern European languages but for the fascination the work has had for practical men. The first translation was made in 1820 by the French architect Rondelet, and the next was the German version of 1841 by the builder Dederich. The English reader had to wait another half-century until, in 1897, an American civil engineer named Clemens Herschel became so interested in Frontinus and his reforms that he made what he called "a pious pilgrimage" from New York to Monte Cassino to see the original manuscript. His power of persuasion must have rivalled that of Poggio four and a half centuries earlier, for the Benedictines allowed him to take the manuscript to Rome and photograph it. Herschel published a facsimile of the manuscript in 1899, accompanied by a translation by Professor Charles E. Bennett of Cornell University, which, in a revised form, is that of the English version in the Loeb Classical Library.

The department which Frontinus managed so admirably had been founded a hundred and thirty years earlier by Marcus Agrippa, who was probably the greatest fountaineer in history; certainly no one else has ever built five hundred fountains in one year. Agrippa, and his lifelong friend and schoolfellow, Octavian (afterwards Augustus), were both in their early thirties when they defeated the murderers of Caesar, and brought the civil wars to an end. They found Rome in a deplorable condition, full of despairing mobs, of dispossessed landowners, ruined farmers and peasants, a city of shabby temples and horrible slums. This was the Rome of brick which Augustus was later in life to say he had transformed into marble.

Describing the city at that time, Dio Cassius said that no one would believe that Rome had a water supply. The sewers were clogged, and the aqueducts were leaking. Of the four existing aqueducts, one, the most recent, the Tepula, was nearly a hundred years old, and the oldest, the Appia, had been in existence for nearly three hundred. Though Agrippa had been consul, he willingly stepped down in rank to aedile to help his friend Octavian to clear up the chaos. His first act was to dismiss the contractors who had managed, or mismanaged, Rome's

water supply for centuries and to form his own government department, which was the Statio Aquarum, and though the human element required attention in future years, Frontinus found that he had no need to alter Agrippa's organization. Having cleaned the sewers and repaired the aqueducts, Agrippa built a new aqueduct, Aqua Julia, and he erected five hundred fountains and seven hundred basins and pools for public use; and all this in one year of office. Having done so, he left Rome to take command of the fleet and to defeat Antony and Cleopatra at Actium in 31 B.C.

In the course of his aedileship, Agrippa had noticed that during the agony of the civil wars various speculators had opened bath houses all over Rome in which the poorest people could forget their worries in hot water for less than a farthing. He counted a hundred and seventy of these establishments. Such was the beginning of the Cult of the Bath which reached such fantastic proportions before the end of the Empire. The craze implied one of those reversals in thought and habit which many of those who live to be over sixty notice in contemporary life. The austere Romans of the Republic were reluctant bathers. Seneca noted that though arms and legs might be washed daily, complete immersion took place only once a week in a small room near the kitchen, and standards of modesty forbade Cato the Censor to take a bath in the presence of his sons, an attitude which still existed in Cicero's time. All this had changed by 23 B.C., when crowds filled the hot baths, which were often simple establishments run by a freedman with the help of a few slaves. It was probably during his year as aedile that the idea occurred to Agrippa to give the populace the most luxurious public bath that had ever been seen, but he was unable to do so until 13 B.C., when the Thermae of Agrippa were opened in the Campus Martius at the back of the Pantheon. A large garden was laid out with an artificial lake, where amid avenues of trees, statues and fountains, stood a palatial bath, which was also a club, a library, and a restaurant, in which hot, cold, steam, shower and plunge baths might be enjoyed. In general effect, Agrippa's Thermae were probably like a more sumptuous Athenian gymnasium, or grove of Academus, though more splendid, costly and extensive. In order that nothing should be missing, Agrippa built a special aqueduct to supply the Baths, the famous Aqua Virgo, which for many years was considered to be the finest water in Rome.

To anyone interested in the aqueducts and the fountains of Rome, the name "M. Agrippa" which has survived above the portico of the Pantheon must always be the most dramatic announcement in the city. He was the greatest of the *aquarii*.