SPRINGS AND FOUNTAINS.

And now for man's share in the work. A hidden force of water has been pressing downward from a great height. It has encountered an opposition of more than common sternness. Man comes and bores a way down into the natural reservoir, and the emancipated stream quickly rises to the surface as a sober, steady well, or. impelled by the intense pressure from the heights, gushes eagerly forth as a leaping and glistening fountain. It is with this last division of our subject that we have now to deal. Men are only too glad to receive this bountiful gift from the heart of the hills, whether the fountain be one of Nature's own forming, or whether artificial aid has intervened; and various have been the contrivances both for its reception and for its guidance into the right channel. The acting principle is the same in all, that water, flowing from a superior height through a confined channel, always seeks its own level. The ancient Romans were not ignorant of this universal principle, which they applied to the supply of their cities with water; but they overlaid it with a cumbrous machinery, which shows that any engineer of our numerous water companies might have given the most skilful of these masters of the world an instructive lesson in hydrostatics. He would have told them that the magnificent and costly aqueduct which they were laboriously leading from the bursting urn of some fabled Naiad in the distant ravine of the purple hills was wholly unneeded, and that he could lay down such arteries beneath the "scarf-skin" of their plains as would make an abounding stream overflow the long ranges of their mosaic-paved public baths, fill every private bath in their thousand marble homes, and leap out in the sculptured fountains which often adorned the central court in their houses. That the Romans had some small foretaste of the system of conveying water by pipes is proved amid the ruins of Pompeii, where a considerable number of leaden pipes has been found, while the almost perfect remains of some of their public fountains, and even the frescoed designs upon the walls, show that the principle of the ascending tendency of water, when flowing from a higher source, was not wholly unknown to these luxurious citizens of Magna Græcia. Bronze figures have been disinterred from the buried city, which had evidently taken their part in spouting water from the ornamental fountains. In Rome there was an officer of high rank who was appointed to superintend the supply of water; and the citizens appear to have paid a high price for the privilege of having it conveyed into their houses. Agrippa is recorded to have presented to his city 105 fountains in a single year, besides 70 ponds of water, and 130 reservoirs. Even the provinces, which

t to ngs n of emper-IOW, pornti-In reak at if way pth, less. the) the nded nary and. fatal sure bove into oints

siand

) in-

urns,

the