

**Objection 1.** It would seem that there are not waters above the firmament. For water is heavy by nature, and heavy things tend naturally downwards, not upwards. Therefore there are not waters above the firmament.

**Objection 2.** Further, water is fluid by nature, and fluids cannot rest on a sphere, as experience shows. Therefore, since the firmament is a sphere, there cannot be water above it.

**Objection 3.** Further, water is an element, and appointed to the generation of composite bodies, according to the relation in which imperfect things stand towards perfect. But bodies of composite nature have their place upon the earth, and not above the firmament, so that water would be useless there. But none of God's works are useless. Therefore there are not waters above the firmament.

**On the contrary,** It is written (Gn. 1:7): "(God) divided the waters that were under the firmament, from those that were above the firmament."

I answer with Augustine (Gen. ad lit. ii, 5) that, "These words of Scripture have more authority than the most exalted human intellect. Hence, whatever these waters are, and whatever their mode of existence, we cannot for a moment doubt that they are there." As to the nature of these waters, all are not agreed. Origen says (Hom. i in Gen.) that the waters that are above the firmament are "spiritual substances." Wherefore it is written (Ps. 148:4): "Let the waters that are above the heavens praise the name of the Lord," and (Dan. 3:60): "Ye waters that are above the heavens, bless the Lord." To this Basil answers (Hom. iii in Hexaem.) that these words do not mean that these waters are rational creatures, but that "the thoughtful contemplation of them by those who understand fulfils the glory of the Creator." Hence in the same context, fire, hail, and other like creatures, are invoked in the same way, though no one would attribute reason to these.

We must hold, then, these waters to be material, but their exact nature will be differently defined according as opinions on the firmament differ. For if by the firmament we understand the starry heaven, and as being of the nature of the four elements, for the same reason it may be believed that the waters above the heaven are of the same nature as the elemental waters. But if by the firmament we understand the starry heaven, not, however, as being of the nature of the four elements then the waters above the firmament will not be of the same nature as the elemental waters, but just as, according to Strabus, one heaven is called empyrean, that is, fiery, solely on account of its splendor: so this other heaven will be called aqueous solely on account of its transparency; and this heaven is above the starry heaven. Again, if the firmament is held to be of other nature than the elements, it may still be said to divide the waters, if we understand by water not the el-

ement but formless matter. Augustine, in fact, says (Super Gen. cont. Manich. i, 5,7) that whatever divides bodies from bodies can be said to divide waters from waters.

If, however, we understand by the firmament that part of the air in which the clouds are collected, then the waters above the firmament must rather be the vapors resolved from the waters which are raised above a part of the atmosphere, and from which the rain falls. But to say, as some writers alluded to by Augustine (Gen. ad lit. ii, 4), that waters resolved into vapor may be lifted above the starry heaven, is a mere absurdity. The solid nature of the firmament, the intervening region of fire, wherein all vapor must be consumed, the tendency in light and rarefied bodies to drift to one spot beneath the vault of the moon, as well as the fact that vapors are perceived not to rise even to the tops of the higher mountains, all to go to show the impossibility of this. Nor is it less absurd to say, in support of this opinion, that bodies may be rarefied infinitely, since natural bodies cannot be infinitely rarefied or divided, but up to a certain point only.

**Reply to Objection 1.** Some have attempted to solve this difficulty by supposing that in spite of the natural gravity of water, it is kept in its place above the firmament by the Divine power. Augustine (Gen. ad lit. ii, 1), however will not admit this solution, but says "It is our business here to inquire how God has constituted the natures of His creatures, not how far it may have pleased Him to work on them by way of miracle." We leave this view, then, and answer that according to the last two opinions on the firmament and the waters the solution appears from what has been said. According to the first opinion, an order of the elements must be supposed different from that given by Aristotle, that is to say, that the waters surrounding the earth are of a dense consistency, and those around the firmament of a rarer consistency, in proportion to the respective density of the earth and of the heaven.

Or by the water, as stated, we may understand the matter of bodies to be signified.

**Reply to Objection 2.** The solution is clear from what has been said, according to the last two opinions. But according to the first opinion, Basil gives two replies (Hom. iii in Hexaem.). He answers first, that a body seen as concave beneath need not necessarily be rounded, or convex, above. Secondly, that the waters above the firmament are not fluid, but exist outside it in a solid state, as a mass of ice, and that this is the crystalline heaven of some writers.

**Reply to Objection 3.** According to the third opinion given, the waters above the firmament have been raised in the form of vapors, and serve to give rain to the earth. But according to the second opinion, they are above the heaven that is wholly transparent and starless. This, according to some, is the primary mobile, the cause of the

daily revolution of the entire heaven, whereby the continuance of generation is secured. In the same way the starry heaven, by the zodiacal movement, is the cause whereby different bodies are generated or corrupted, through the rising and setting of the stars, and their various influences. But according to the first opinion these waters are set there

to temper the heat of the celestial bodies, as Basil supposes (Hom. iii in Hexaem.). And Augustine says (Gen. ad lit. ii, 5) that some have considered this to be proved by the extreme cold of Saturn owing to its nearness to the waters that are above the firmament.