

## chapter 8 A company of wax homunculi

It is now time to look beyond the institutes, the instruction of future doctors, scientists and teachers, and the professors' increasingly esoteric research. To grasp the larger significance even of the Zieglers' famously academic models, we need to explore how making and using them crossed the divide that, through the nineteenth century, embryology opened up between medical and lay understandings of generation. So we shall take a closer look at some of the waxes, beginning with the collection of specimens and ending with the display of the models to laypeople. Gaining an outsider's perspective will give us a far stronger sense of the extraordinary physical and intellectual transformations achieved by the routine work of anatomists and modellers – labour we might otherwise all too easily take for granted. This point is most important for human embryos. It will also make sense to concentrate on the His-Ziegler models from the 1880s, which we met in chapter 5 (plates 17-18; series 1 and 3), because in the decades around 1900 these were among the most authoritative and frequently used representations of human development.204

His began by collecting specimens from physicians who had access to miscarried or aborted material and very occasionally the corpse of a pregnant woman. He eventually acquired over six dozen embryos. To induce especially gynaecologists to give up their "precious objects" His wielded stick and carrot. 205 Strong words punished those he claimed had been wasting or ruining valuable specimens through insufficient or incompetent analysis. But anyone who agreed "to collect material and in the interest of research to sacrifice it on the altar of science"206 he rewarded by giving the embryo their name – the physician's, that is, not that of the woman from whose body it came. Even after large numbers made using the initial letters of donors' surnames too cumbersome, His continued scrupulously to credit his suppliers – or rather, some of them. The midwives of Leipzig, who provided 22 specimens, may have been paid instead.

Naming took possession of previously very differently interpreted materials. Even by the end of the nineteenth century pregnancy, especially early pregnancy – His studied embryos from the first two months - was still not generally understood in embryological terms. The plebeian women on trial for illegal abortion in early twentieth-century Basel played down the significance of treatments, such as the injection of soapy water, which caused one to pass "a small clump of clotted blood". They stressed instead their urgent need "to get rid of the thing". 207 Others

Wilhelm His grasps the form of a human embryo (detail of fig. 37b).