

[580] Puzzles and conundrums are deliberately constructed to use our thought-habits in this way to defeat our effort to solve a problem. For instance, try to explain this one: Two Indians walk silently through the forest, in single file, a big Indian and a little Indian. The little Indian is the son of the big Indian, but the big Indian is *not* the father of the little Indian. Or solve this one, if you have not heard it: What has four wheels and flies?

SOME IMMEDIATE REMEDIES FOR SOLVING THE PUZZLES OF INVENTION

[581] Claude,⁵³⁹ like Kettering⁵⁴¹ and some others facing the horns of this dilemma, of the ambivalence of knowledge, preferred to saw off one useful horn, knowledge, deliberately refusing to look up the literature, until he had thought up a solution that justified hope. "Casse-cou, cette méthode? Peut-être; pas plus pourtant que l'autre, la sage, n'est stérilisatrice."⁵⁴²

[582] Kipling gave thanks for having "two separate sides to my head." Our basic problem is to get the two sides to working together, the side packed with information and old habits, and the side full of ignorance and hence free-ranging possibilities of originality. Claude and Kettering would use first only the ignorant side. Most people try the opposite side and fail. Another solution occasionally resorted to is to employ separate men.⁵⁴³ E.g., a corporation will set a graduate student in a university to working on their problems. With his ignorance he is likely only to repeat their efforts and find nothing both new and good. But on the other hand, with his less trammelled mind he *might* perceive something they had steadfastly overlooked.⁵⁴⁴ (And in any case he gets training, and a good introduction to the company and its work.) A much commoner form of this plural-men procedure, and one that we have said, should be more seriously handled (§ 400, 458), is to invite suggestions from wide circles, and then have these criticized by authentic experts who should somehow preserve a hopeful, searching outlook for the very few ideas which would be found worthy of development by further experts. A method constantly employed by the laboratories is to consign the building, testing, and other more routine work on inventions and research to varied technicians, since such work uses up, annoys, and deadens the rare originative minds, and the routine specialist can be more expert at it, or youthful engineers be trained through it. Simple multiplication of the seekers helps speed success through more chances albeit with falling efficiency. Scanning the ideas of many prior contestants, and of one's own earlier work, has its good as well as stultifying possibilities.

[583] Another means for obtaining an equipped yet habit-free mind might be to add the help of a robot, an electronic computer. For they can develop habits, or not, as ordered, and can do anything they are instructed in, overlooking nothing. In particular, they have already been taught to translate between various languages.⁵⁴⁵ Translating, with or without a machine, from English into Ruly English, the new dialect the Patent Office is working on for mechanization pur-

⁵⁴² "A method for breaking your neck? Perhaps, but no worse than the other, the wise way, which *sterilizes*." Our ITN 539, p. 180.