

differ much in disposition and character, and in some small degree in song. They produce eggs three or four times during the year.

## GOLD-FISH.

BESIDES mammals and birds, only a few animals belonging to the other great classes have been domesticated; but to show that it is an almost universal law that animals, when removed from their natural conditions of life, vary, and that races can be formed when selection is applied, it is necessary to say a few words on gold-fish, bees, and silk-moths.

Gold-fish (*Cyprinus auratus*) were introduced into Europe only two or three centuries ago; but they have been kept in confinement from an ancient period in China. Mr. Blyth<sup>50</sup> suspects, from the analogous variation of other fishes, that golden-coloured fish do not occur in a state of nature. These fishes frequently live under the most unnatural conditions, and their variability in colour, size, and in some important points of structure is very great. M. Sauvigny has described and given coloured drawings of no less than eighty-nine varieties.<sup>51</sup> Many of the varieties, however, such as triple tail-fins, &c., ought to be called monstrosities; but it is difficult to draw any distinct line between a variation and a monstrosity. As gold-fish are kept for ornament or curiosity, and as "the Chinese are just the people to have secluded a chance variety of any kind, and to have matched and paired from it,"<sup>52</sup> it might have been predicted that selection would have been largely practised in the formation of new breeds; and this is the case. In an old Chinese work it is said that fish with vermilion scales were first raised in confinement during the Sung dynasty (which commenced A.D. 960), "and now they are cultivated in families everywhere for the sake of ornament." In another and more ancient work, it is said that "there is not a household where the gold-fish is not cultivated, in rivalry as to its colour, and as a source of profit," &c.<sup>53</sup> Although many breeds exist, it is a singular

<sup>50</sup> The 'Indian Field,' 1858, p. 255.

<sup>51</sup> Yarrell's 'British Fishes,' vol. i. p. 319.

<sup>52</sup> Mr. Blyth, in the 'Indian Field.'

1858, p. 255.

<sup>53</sup> W. F. Mayers, 'Chinese Notes and Queries,' Aug. 1868, p. 123.