lour ; but when but ſlightly eroded, it appears of a variegated mixture of green and red ; whence it has been called the *parroquet shell.* The common helmet- ſhell, when wrought, is of the colour of the fineſt agate ; and the muſcles, in general, though very plain ſhells in their common appearance, become very beauti­ful when poliſhed, and ſhow large veins of the moſt ele­gant colours. The Persian ſhell, in its natural ſtate, is all over white, and covered with tubercles ; but when it has been ground down on a wheel, and poliſhed, it appears of a grey colour, with spots and veins of a very bright and highly poliſhed white. The limpets, in general, become very different when poliſhed, moſt of them ſhowing very elegant colours ; among theſe the tortoiſe ſhell limpet is the principal ; it does not appear at all of that colour or tranſparence till it has been wrought.

That elegant ſpecies of ſhell called the *junquil-chama,* which has deceived ſo many judges of these things in­to an opinion of its being a new ſpecies, is only a white chama with a reticulated ſurface ; but when this is po­liſhed, it loses at once its reticular work and its colour, and becomes perfectly ſmooth, and of a fine bright yellow. The violet coloured chama of New Eng­land, when worked down and poliſhed, is of a fine milk-white, with a great number of blue veins, dispoſed like the variegations in agates.

The *asses-ear ſhell,* when poliſhed after working it down with the file, becomes extremely gloſſy, and ob­tains a fine roſe-colour all about the mouth. Theſe are ſome of thc moſt frequent among an endleſs variety of changes wrought on ſhells by poliſhing ; and we find there are many ot the very greateſt beauties of this part of the creation which must have been lost but for this method of ſearching deep in the ſubſtance of the ſhell for them.

The Dutch are very fond of ſhells, and are very nice in their manner of working them : they are under no reſtramt, however, in their works ; but uſe the moſt violent methods, ſo as often to deſtroy all the beauty of the ſhell. They file them down on all fides, and often take them to the wheel, when it must deſtroy the very characters of the ſpecies. Nor do they ſtop at this : but, determined to have beauty at any rate, they are ſor improving upon nature, and frequently add ſome lines and colours with a pencil, afterwards covering them with a fine coat of varniſh, ſo that they ſeem the natural lineations of the ſhell: the Dutch cabinets are by theſe means made very beautiful, but they are by no means to be regarded as inſtructors in natural hiſtory. There are ſome artificers of this nation who have a way of covering ſhells all over with a different tinge ſrom that which nature gives them ; and the curious are of­ten enticed by theſe tricks to purchaſe them for new ſpecies.

There is another kind of work beſtowed on certain ſpecies of ſhells, particularly the nautilus ; namely, the engraving on it lines and circles, and figures of liars, and other things. This is too obvious a work of art to ſuffer any one to ſuppoſe it natural. Buonani has figured ſeveral of theſe wrought ſhells at the end of his work ; but this was applying his labour to very little purpoſe; the ſhells are ſpoiled as objects of natural hiſtory by it, and the engraving is ſeldom worth any thing.— They are principally done in the Eaſt Indies,

Shells are ſubject to ſeveral imperfections ; ſome of which are natural and others accidental. The natural defects are the effect of age, or fickneſs in the fiſh. The greateſt miſchief happens to ſhells by the fiſh dying in them. The curious in theſe things pretend to be al­ways able to diſtinguiſh a ſhell taken up with the fiſh alive from one found on the ſhores : they call the firſt a *living,* the ſecond a *dead* ſhell ; and say that the co­lours are always much fainter in the dead ſhells. When the ſhells have lain long dead on the ſhores, they are ſubject to many injuries, of which the being eaten by ſea-worms is not the leaſt : age renders the finest ſhells livid or dead in their colours.

Beſides the imperfections ariſing from age and sick­neſs in the fiſh, ſhells are ſubject to other deformities, ſuch as morbid cavities, or protuberances, in parts where there ſhould be none. When the ſhell is va­luable, theſe faults may be hid, and much added to the beauty of the ſpecimen, without at all injuring it as an object of natural hiſtory, which ſhould always be the great end of collecting theſe things. The cavities may be filled up with maſtic, diſſolved in spirit of wine, or with isinglaſs : theſe ſubſtances muſt be either coloured to the tinge of the ſhell, or elſe a pencil dipped in wa­ter-colours muſt finiſh them up to the reſemblance of the rest ; and then the whole ſhell being rubbed over with gum-water, or with the white of an egg, ſcarce any eye can perceive the artifice : the same ſubſtances may alſo be uſed to repair the battered edge of a ſhell provided the pieces chipped off be not too large. And when the excreſcences of a ſhell are faulty, they are to be taken down with a fine file. If the lip of a ſhell be ſo battered that it will not admit of repairing by any ce­ment, the whole muſt be filed down or ground on the wheel till it become even.

*Fossil Shells.* Those found buried at great depths in the earth.

Of theſe ſome are found remaining almoſt entirely in their native ſtate, but others are variouſly altered by being impregnated with particles of ſtone and of other foſſils ; in the place of others there is found mere ſtone or ſpar, or ſome other native mineral body, expreſſing all their lineaments in the moſt exact manner, as having been ſormed wholly from them, the ſhell having been first deposited in ſome ſolid matrix, and thence dissolved by very slow degrees, and this matter left in its place, on the cavities of ſtone and other ſolid ſubſtances, out of which ſhells had been diſſolved and waſhed away, be­ing afterwards filled up leſs ſlowly with theſe different ſubſtances, whether ſpar or whatever elſe ; theſe ſub­ſtances, ſo filling the cavities, can neceſſarily be of no other form than that of the ſhell, to the abſence of which the cavity was owing, though all the nicer li­neaments may not be ſo exactly expressed. Beſides theſe, we have alſo in many places maſſes of ſtone formed within various ſhells ; and theſe having been received into the cavities of the ſhells while they were perfectly fluid, and having therefore nicely filled all their cavities, muſt retain the perfect figures of the in­ternal part of the ſhell, wſhen the ſhell itſelf ſhould be worn away or periſhed from their outſide. The va­rious ſpecies we find of theſe are, in many genera, as numerous as the known recent ones ; and as we have in our own iſland not only the ſhells of our own ſhores, but thoſe of many other very diſtant ones, ſo we have