It is a moſt faithſul carrier oſ heat, and will deliver its whole charge to anybody that can take it. Therefore, although there were no partitions in the stew-chest, and the ſteam were admitted at the end next the boiler, if the pan at the farther end be colder than the rest, it will all go thither ; and will, in ſhort, communicate to every thing impartially according to the demand. If any perſon has not the confidence in the ſteam which we expreſs, he may ſtill be certain that there muſt be a prodigious ſaving of heat by confining the whole in the stew-cheſt ; and he may make the pans with entire bot­toms, and admit the ſteam into them in the common way, by pipes which come through the ſides of the cheſt and then go into the pan. There will be none loſt by condenſation on the ſides of the cheſt; and the pans will ſoon be heated up to the boiling temperature; and hardly any of their heat will be waſted, becauſe the air in the cheſt will be ſtagnant. The chief reaſon for recommending our method is the much greater eaſe with which the ſtew pans can be ſhifted and cleaned. There will be little difference in the performance.

Nay, even the common ſteamſkſtchen may be prodigiouſly improved by merely wrapping each pan in three or four folds of coarſe dry flannel, or making flannel bags of three or four folds fitted to their shape, which can be put on or removed in a minute. It will alſo greatly conduce to the good performance to wrap the main ſteam pipe in the same manner in flannel.

We ſaid that this main-pipe is conducted from the boiler with a gentle aſcent. The intention of this is, that the water produced by the unavoidable condenſa­tion of the ſteam may run back into the boiler. But the rapid motion of the ſteam generally sweeps it up hill, and it runs into the branch-pipes and deſcends into the ſtew-pans. Perhaps it would be as well to give the main-pipe a declivity the other way, and allow all the water to collect in a hot well at the farther end, by means of a deſcending pipe, having a loaded valve at the end. This may be ſo contrived as to be cloſe by the fire, where it would be ſo warm that it would not check the boiling if again poured into the boiler. But the utmoſt attention muſt be paid to cleanlineſs in the whole of this paſſage, becauſe this water is boiled again, and its ſteam passes through the heart oſ every diſh. This circumſtance forbids us to return into the boiler what is condenſed in the ſtew-pans. This would mix the taſtes and flavours of every diſh, and be very diſagreeable. All this muſt remain in the bottom of each ſtew-pan ; for which reaſon we put in the pipe riſing up in the middle of the bottom. It might indeed be allowed to fall down into the ſtew-cheſt, and to be col­lected in a common receptacle, while the fat would float at top, and the clear gravy be obtained below, perhaps fit for many ſauces.

The completeſt method for getting rid of this con­denſed ſteam would be to have a ſmall pipe running along the under side of the main conductor, and com­municating with it at different places, in a manner ſimilar to the air diſcharger on the mains of water-pipes. In the paper manufacture mentioned above, each ſteam- box has a pipe in its bottom, with a float-cock, by which the water is diſcharged ; and the main pipe being of great diameter, and laid with a proper acclivity, the water runs back into the boiler.

But theſe precautions are of little moment in a ſteam-kitchen even for a great table ; and for the general uſe of private families, would hurt the apparatus, by ma­king it complex and of nice management. For a ſmall family, the whole apparatus may be ſet on a table four feet long and two broad, which may be placed on call­ers, ſo as to be wheeled out of the way when not in uſe. If the main conductor be made of wood, or pro­perly caſed in flannel, it will condenſe ſo little ſteam that the cooking table may ſtand in the remoteſt corner of the kitchen without ſenſibly impairing its perform­ance ; and if the boiler be properly ſet up in a ſmall furnace, and the flue made ſo that the flame may be ap­plied to a great part of its ſurface, we are perſuaded, that three-fourths of the fuel uſed in common cookery­will be ſaved. Its only inconvenience ſeems to be the indispensable neceſſity of the moſt anxious cleanlineſs in the whole apparatus. The moſt trifling neglect in this will deſtroy a whole dinner.

We had almoſt forgotten to obſerve, that the boiler muſt be furniſhed with a funnel for ſupplying it with water. This ſhould paſs through the top, and its pipe reach near to the bottom. It will be proper to have a cock on this funnel. There ſhould alſo be another pipe in the top of the boiler, having a valve on the top. If this be loaded with a pound on every ſquare inch, and the fire ſo regulated that ſteam may be obſerved to puff ſometimes from this valve, we may be certain that it is paſſing through our diſhes with ſufficient rapidity ; and if we ſhut the cock on the funnel, and load the valve a little more, we ſhall cauſe the ſteam to blow at the covers oſ the ſtew-pans. If one of theſe be made very tight, and have a hole alſo furniſhed with a loaded valve, this pan becomes a digeſter, and will diſſolve bones, and do many things which are imprac­ticable in the ordinary cookery.

*Si quid novisti rectius istis,*

*Candidus imperti ;— si nοn, hiis utere nostris.*

STEATITES or *Sοap-earth,* a genus of the magneſian order of earths. Of this genus there are ſeveral ſpecies, for which ſee Mineralogy. According to the analyſis of Bergman, 100 parts of ſteatites contain 80 of ſilex, 17 of mild magneſ a, 2 of argillaceous earth, and nearly 1 of iron in a ſemioxidated ſtate.

This ſubſtance may be formed into a paſte with water, sufficiently ductile to be worked on the potter’s wheel ; and by expoſure to a great heat it is hardened ſo as to ſtrike fire with ſteel. It has alſo the property of *FulLER'S Earth* in cleanſing cloths from greaſe : but it does not diffuſe in water ſo well as clays do ; and when digeſted with vitriolic acid, it does not form alum, as clays do, but a ſalt ſimilar to Epſom ſalt. From its ſoftneſs and ductility it may be eaſily formed into pots for the kitchen ; and hence it has got the name of *lapis οllaris.*

STEATOMA, a kind of encyſted tumor, conſiſting of a matter like ſuet or lard, ſoft, without pain, and without diſcolouring the skin.

STEEL·, iron united with carbone. See Iron.

Steel has properties diſtinct from thoſe of iron, which render it of ſuperior value. From its higher degree of hardneſs it admits a finer poliſh and aſſumes a brighter colour. When tempered, it poſſesses a higher degree of elaſticity, and is alſo more ſonorous. It is more weak­ly attracted by the loadſtone, it receives more ſlowly the magnetic power, but it preſerves it longer. When expoſed to a moist air, it does not contract ruſt ſo eaſily as