

SUBSTITUTES FOR GLASS.

An interesting account of glass substitutes is given in a recent copy of the *Journal of the Society of Arts*. Tectorium, which is used in Germany as a substitute for glass, is a sheet of tough insoluble gum—said to be bichromated gelatin—about one-sixteenth of an inch thick, overlying on both sides a web of galvanized iron or steelwire, the meshes of which are generally about one-eighth of an inch square. It feels and smells similar to the oiled silk that is used in the surgery. It is lighter than glass, tough, pliant and practically indestructible by exposure to rain, wind, hail, or any shock or blow which does not pierce or break the wire web. It may be bent into any desired form, and when punctured can be easily repaired. Its translucency is about the same as that of opal glass with a greenish amber color, which fades gradually to white on exposure to the sun; so that, while arresting the direct rays of sunshine, it transmits a soft, modulated light, which is said to be well adapted to hothouses and conservatories. It is a poor conductor of heat and cold. Its surface is well adapted for printing in oil colors, and is thus valuable for decorative purposes. The objections against it are that it is inflammable, and is apt to soften in warm weather. For hotbeds or forcinghouses the Germans have another substitute glass called Fensterpappe, which is a tough, strong Manilla paper which is soaked in boiled linseed oil until it becomes translucent and impervious to water. This paper costs wholesale in Germany about 19s. 6d. per roll one hundred metres in length by one metre in width. It admits sufficient light for growing plants, does not require to be shaded in hot sunshine, is light, durable, and practically secure against breakage, and is said to be a hundred times cheaper than glass. There is a new product recently patented and placed on the German market called Hornglas. It is very much similar to Tectorium in appearance and properties, the two advantages claimed for it being greater transparency and

less liability of softening under a hot sun.

"NO TIME."

Housewives are always complaining about having "no time" for this or that pleasure or recreation. They have no time for reading, no time for visiting, no time to play with the children; in fact, no time for anything but the same old drudgery day in and day out. Why should a woman be nothing but a domestic drudge? It is not necessary, nor does it follow as a consequence that she must be dull, dowdy, and old-fashioned. It never was intended that she should spend her entire life in caring only for bodily wants, utterly neglecting the needs of the higher nature. To keep in touch with the world by reading good papers, to get better thoughts and purer purposes by reading good books, to keep up the old acquaintances, both by visiting and letter writing, and, best of all, to keep herself looking well, should be the duty as well as the pleasure of every housewife.

If the work could be so arranged that an hour a day at least could be secured for reading, for a walk or drive, the used-up energies would be recruited, and both body and spirit benefitted. There is no gain in this constant work, work, all the time. A woman ages soon enough without that aid. It is not a waste of time to stop for a while. To shut herself up from all society and to make a slave of herself on the plea of "no time" is a sacrifice that few women are called on to make for their families. Much of the drudgery is due to their weak indulgence of children in idleness. They will slave that their children may have pleasures and advantages they never had. Let mothers teach the young to share her work, and let her take time to enjoy something of God's good world.

A man who loves only himself and his pleasures is vain, presumptuous and wicked even from principle.—Vauvenargues.