

THE WINDOW GARDEN.

Nothing adds more to the cheerful appearance of the interior a house but too frequently it of a house than an array of choice plants, but too frequently it happens that it is not not not containing them are permitted handouse than an array of choice plants, out two induced to the plants that the hideous red pots containing them are permitted to stand that the hideous red pots containing the pleasurable to stand out in bold relief, entirely neutralizing the pleasurable effect of the plants. Our engraving shows a beautiful plant tand, or min plants. hand, or window garden, which may receive the earth in which the placed in it and hidden be plants are rooted, or the pots may be placed in it and hidden by it. The fish is the risks at the top give it life, and the whole by it. The fish in the globe at the top give it life, and the whole a beautiful ornament for the window.

BIOPLASM.

Among the recent discoveries in science, none perhaps will these relating to bioplasm, Nove of more utility to man than those relating to bioplasm, cause they throw light on physiological questions, particularly lose concerning the construction and nutrition of the body and is causes of diverse. It was furnerly supposed that our bodies causes of disease. It was formerly supposed that our bodies

were alive from top to toe, inside and out; but this is found to be a mistake. Only about one-fifth part is alive; the rest is formed material. Everybody knows that a tree may be one so hollow that only a shell is left; yet the tree may grow and mature buds and leaves and fruit. It is because the outside of the tree-the bark-is alive ; the wood is non-living ; it is simply formed material. Now the body is not like the tree-alive only on the outside ; but the living portion and the formed material

exist together in every part--in every tissue, organ and vessel. A slight abrasion of the cuticle, or the rupture of a cell, is followed by particles of fluid which were formerly overlooked as of no account. But the microscope has revealed to us that this apparently useless, insignificant ooze is the vital, living part of the body; it is bioplasm.

This is the mechanic, the skilled artist, that constructs the cells, builds the organ, and perhaps, under the direction of a higher power, adapts each part to one harmonious whole.

For the last 15 years certain English and German physiologists have spent much time with the microscope, watching this little workman. They have seen it forming tissue, muscle and nerve, changing food into blood, making the secretions ; and, as part of the body became worn and effete, silently disintegrating and utilizing them, or removing the useless parts from the body.

The first decided knowledge of bioplasm came by accident (if finding a thing we are searching for can be called accident ; is it not rather revelation?), by ascertaining that when a piece of live tissue is immersed in a solution of carmine the bioplasm is stained, and the formed material is not stained. This discovery has enabled observers to find and watch this little workman. while busy in constructing every part of the body. Bioplasm is the builder not only of the body, but of all ani-

mals and plants. To it every organized form, whether animal or vegetable, owes its formation and growth.

Bioplasm is a clear, colorless fluid, like thin mucus. Only microscopes of the highest power are of use in studying the substance; for the largest normal masses are not one-thousandth of an inch in diameter; but such microscopes fail to detect in it the least sign of organization.-Journal of Chemistry.

MAKING LUMBER FROM STRAW.

A person named S. H. Hamilton, of Bushnell, Illinois, has been in this city for two or three days past, with samples of lum-ber which has attracted much attention among the lumbermen and which, if it possesses all the virtues that are claimed for it, is one of the most important inventions of its kind ever brought to notice. If it is a success it will form a new era in the art of building. To make hard wood lumber out of common wheat straw, with all effects of polish and finish which is obtainable on the hardest of black walnut and mahogany, at as little cost as clear pine can be manufactured for, is certainly wonderful. Such are the claims of Mr. Hamilton for the straw board lumber which he has been exhibiting in this city, and the samples which he produces would go far towards verifying his claims. The pro-cess of manufacture, as explained by Mr. Hamilton, is as follows: Ordinary straw board, such as is manufactured at any paper mill, is used for this purpose. As many sheets are taken as are required to make the thickness of lumber desired. These sheets are passed through a chemical solution, which thoroughly softens up the fiber and completely saturates it. The whole is then passed through a succession of rollers, dried and hardened during the passage, as well as polished, and comes out of the other end of the machine hard, dry lumber, ready for use. Mr. Hamilton claims that the chemical properties hardening in the fibre entirely prevent water soaking, and render the lumber combustible only in a very hot fire. The hardened finish on the outside also makes it impervious to water. The samples which Mr. Hamilton exhibits could hardly be told from hard wood lumber, and sawing it the difference could not be detected. It is susceptible of a very high polish, and samples of imitation of marble, mahogany, etc., were shown, which might deceive the most experienced eye. Not only does Mr. Hamilton claim a substitute for lumber in sash, doors and blinds and finishing stuff, but also as a substitute for black walnut and other woods in the manufacture of all kinds of furniture, coffins, etc., and also an excellent substitute for marble in marble-top tables, mantle pieces, bureaus, etc. He claims that it will not warp in the least. Mr. Hamilton is negotiating with parties here, with the view of establishing a manufactory in this city for making the various articles of building material for which his lumber is suitable .-- Oshkosh, Wes., Northwestern.