## FARM AND HOUSEHOLD.

Ban Notes

Great progress has been made in the past few years in the distribution of black bass in the Susquehanna and many other rivers, as well as in lakes and ponds Notwithstanding the headway which Las been made in this branch of pisciculture the letters of inquiry are many, showing that a large number of persons have imperfect information concerning the habits of the fish and the best methods of in of the fish and the best methods of in troducing them. People inquire for the spawn, supposing that they are propag-ated like the salmonide. But all attempts to take spawn from this fish have been failures, so far as we are informed. Some ponds have been stocked with the fry but it remains to be seen whether this will prove successful. The fry are very small, and remain but a few days over the beds where they are hatched, so that it requires very close watching to capture them. They are removed just at the time when t ey are said to have the protect-ton of the parent fish, and th y are all hable to per shim i ew water among the er species of fish. The common and the most reliable method of introducing the bass is to transport adult fish from well stocked ponds to new localities. This, when properly done, has never been known to fail. In most of the states known to fail. In most of the states there is legal protection to the fish for thre y-rars, generally granted by special act of the Legislature. But this is not long enough to secure the object. It should be, in all cases, five years. The fish do not but freely until after the spawning is over in May or June, and they do not usually reach their new home until July or later so that there is no fry they do not usually reach their new nome until July or later, so that there is no fry from them until the second year. The fish generally selected for transfer are from one to three years old, measuring from three to twelve inches in length -Fish of this size are not only more numerons, but they bear transportation better nd are more readily acclimated, than when larger. They are moved with a good deal of difficulty in hot weather especially when the journey requires more than twelve or fifreen hours. With the most skillfal management there will be a considerable loss. In the fall months there is much less loss. There is great want of informating in regard to the character of the water suitable to this

The bass wants clear, lively water with it the better. It wants room for itself and for the poorer kinds of fish upon which it feeds voraciously. It does well in the mill ponds upon manufacturing streams, and if the head waters and reservoirs are stocked, they will in a few years be found in all the waters below. They flourish also in natural ponds of twenty acres or more. Some decline to stock these ponds or lakes because they are generally free to the public. But this is shortsighted policy A large pond or lake stocked at a cost of one or two hundred dollars and protected by law for figure dollars, and protected by law for five years, will furnish better sport to the gentlemen or company who undertake the enterprise than they could find in any small pond of their own. In suitable water black bass multiply very fast, and after they once gain possession their num-bers can never be very seriouely reduced be a can never be very scribbely reduced by hook fishing. The annual spawning will more than keep up the supply.— There are thousands of ponds and lakes in the northern and middle states of one hundred to a thousand acres, producing only the poorer kinds of fish, that might casily be stocked with bass and add largely to the food supply of the people. Harrisburg Patrict.

## A Durable Coment.

This cement, which will not withstand the action of concentrated and dilute acids. But is also refractory against al-kaline levs, ether, alcohol, bisalphide of carbon, benzole, and other dissolving substances, consists simply of a mixture of commercial glycerine and finely pul-verized litharge. In mixing glycerine and litharge, a paste is obtained which will harden in from ten to thirty minutes depending on the larger or smaller



depending on the larger or smaller amount of litharge taken. With this cement all metals, and in with this cement all metals, and in fact all solid bodies, may be fastened to each other, not only in open air, but also under water or other fluids, as it hurdens just as quickly and as well where there is in air. It can withstand a tempertaure of 225 degrees and may therefore be employed in any case where at present oil cement is used. In connecting chemical or technical opparatus that are exposed to chlorine or hydrochloric acid gas, sul-pur, nittric acid, and other strongly corrosive fumes, this cement has been found to be excellent. The same may be aid about the fumes alcohohol, ether bisnlphide of carbon, and carbohydrides in general which, even boiling, are totally inactive upon it.

The Pall Mall Gazette says: "It is to be regretted that no animal save man was able to take part in the meetings held in Loadon by International Con-Animals, for the Prevention of Cruelty to Animals, for there can be little doubt that an intelligent animal, gifted with speech, would have pointed out many acts of cruelty commited on dumb creatures which are entirely overlooked, by those who confine their observation to active acts of cruelty, and forget that some of the greatest sufferings endured by both man and beast arise from sins of omission rather than of commission. For instance it is cruel to beat a horse with unneces-sary violence. but it is even more cruel to keep the horse in the stable without sufficient air or exercise, and with food eith er more than enough or less than enough to preserve the beach in good health. If the members of the Congress had in-spected the stables in the mews hidden behind the big houses of London, they would have found horses of every des-cription shut up in ill ventilated, over crowded prisens, uncheered by one ray of sunshine, and either over fed or half starved, according to the rascality or ig-norance of the coachman and his fellow stableman. Death to many of these horses would be a positive boon compared ficient air or exercise, and with food eith horses would be a positive boon compared with the unhealthy monotonous existence they lead."

A good grindstone and a set of files are among the best of farm investments especially at this scargen. It is always nice to be forehanded, to get things well ahead; but the best of all forehandedness is that which prepares in advance a full set of good and well-repaird tools to work with.

when dry weigh a ton. -