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## NOTES ON COLEOPTERA.-No. 8.

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Panageus crucigerus, Say.—The living beauty of this beetle is but feebly represented by the dull and faded examples usually seen in collec-Its bright sparkling colours lose their brilliancy onward after life ceases, for which no restorative has yet been discovered. It is not infrequent along the New Jersey coast, occurring sometimes in abundance. The mature insects may be found on Brigantine Beach from the middle of July onward. ... 'hey are in their greatest abundance about the first of September, at which time they seem to be disclosed. The eggs of many Carabidæ are deposited in July and August, and from such, imagoes are produced during the same months of the succeeding year. of these same and other species hibernate and oviposit in the spring, but their offspring are usually not perfected till the next year. Panageus crucicerus, however, at least on the coast, seems to oviposit in the spring, probably during April, and to disclose the same year about the time mentioned, as appears from observations repeatedly made, one of which is Sandy depressions are seen covered in summer two or three inches in thickness with sea trash, below which the ground is damp from capillary attraction, as they are only a few inches above the ordinary summer tides. These are the beds of tidal streams, which, during the winter and spring till near April, are constantly covered with salt water from ocean or bay, many of them being formed during that time, and previously existing ones filled up. On the first of September, on overturning some of the weeds deposited on one of such places, several examples of P. crucigerus, too immature for use, were taken, which evidently had been bred where they were found. As this bed had been formed during the winter, of course the eggs from which these insects were derived must have been deposited after March. It was physically impossible for the larvæ to have reached there from other places, because for a long distance around there was nothing but dry and burning sand.