ham sheet and a large portion of the work north of that place, covering, in all, eighty-five square miles : Mr. Johnson's forces in the western mountainous part of the state have completed fortynine square miles; Mr. Bodfish's division have finished altogether two hundred and twelve square miles in Massachusetts, one-half of which was partly done last year; of the region around the District of Columbia, thirty-five square miles have been completed; Mr. Griswold has a very large party at work in northern Virginia, who have completed seven hundred square miles; the central division, under Mr. Renshaw, is getting under way; Mr. Davis is at work in central Arizona, and has completed eight hundred square miles; Mr. Wilson is at work in the gold region around Oreville, in the gold belt, with two topographical parties and one triangulation party; the topographical work covers three hundred and seventy-seven square miles, but both parties were retarded somewhat by bad weather. Up to Aug. 27, 53 sheets of the general topographical atlas of the United States have been published; there are 48 sheets in proof.

- The coast-survey parties are now in the field busily engaged in pushing the work forward. Two topographic parties and one hydrographic party are already at work on the resurvey of San Francisco Bay. Owing to the very limited appropriation for the Alaska work (only \$4,000 being appropriated in lieu of \$9,000 asked for), the steamers especially employed for this work at an expense of several hundred thousand dollars are to be immediately called from the field, there being no money to carry forward the necessary work for which an admirable plant had been provided. Professor Davidson has returned from Portland, Ore., where he was engaged in astronomic and magnetic work. to San Francisco, and has resumed his duties in charge of several parties on the Pacific coast. The parties on the transcontinental arc are all at work except Assistant Eimbeck, who would be in the field were it not for the lateness of the season, which is inopportune for locating stations on the summit of the Rocky Mountains. The telegraphic longitude parties are at Salt Lake and Ogden. Subassistant Marr is ordered from the magnetic observatory at Los Angeles to report for duty in telegraphic longitude work at Salt Lake. The physical hydrography of Delaware bay and river has been completed as far as this year's appropriation will carry it, and Assistant Merinden is about to transfer his party to New York bay and harbor, where the work of last summer will be continued. If progress is as rapid as it has been heretofore, the resurvey of Long Island Sound will be completed

the present season. Assistant Weir will take up the topographical work in the vicinity of Chatham, Mass., in connection with Professor Mitchell's physical survey of Monomoy Shoals. Mr. F. M. Thorn, superintendent of the coast survey, who left Washington for Orchard park near Buffalo, N.Y., has returned to his official duties.

## LETTERS TO THE EDITOR.

\*\*\*Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.

## 'Thumb-marks.'

THE letter on 'thumb-marks' in No. 185 of Science recalls to mind an extract cut from a newspaper in March, 1883, headed 'Thumb portraits.' The matter was taken from the 'World of wonders.' In it reference is made to the spiral grooves on the skin of the thumb, with the remark that the figure on each thumb remains the same during life, but the marks are different on each. It then goes on to state, "The Chinese take advantage of all this to identify their important criminals, at least in some parts of the empire. We photograph their faces; they take impressions from their thumbs These are stored away, and if the delinquents should ever again fall into the hands of the police, another impression at once affords the means of comparison. The Chinese say that, considering the alteration made in the countenance by hair and beard, and the power many men have of distorting or altering the actual features, etc., their method affords even more certain and easy means of identification than our plan of taking the criminal's portrait."

A year or more ago a gentleman of Cincinnati proposed to take advantage of this fact, and apply the thumb-mark to railroad tickets, to prevent their falling into the hands of scalpers. He brought it to the attention of several railroad managers, who thought favorably of it; but meeting with considerable difficulty in making arrangements to get the mark without too great inconvenience to the purchaser, and likewise, I believe, discovering that the process could not be patented, it was given up. At least, I have not heard any thing of it lately.

Miami university, Oxford, O.

JOSEPH F. JAMES.

## Revivification.

It is well known by all zoölogists that many animals, such as tardigrades, rotifers, anguillulae, and others, are subject to revivification, as Needham, Spallanzani, Doyère, and others have shown. Could some reader of *Science* tell me whether experiments of a similar nature have been performed in America on these same animals, and let me know the name of the experimenters, as well as the title, date, and place of publication of their papers? I would be also much obliged if any one could tell me whether the experiments have been performed on other animals, of superior organization. Lastly, can some one give me information concerning Hindoo fakirs, who, it is said, can fall into a state of trance, and remain seemingly dead, and in fact buried for a long time,