was used. Cutting for cooperage purposes is far more wasteful than is ordinary lumbering. The Forest Service in taking up this question aims to make its investigations of practical value to the cooperage industry and its operators. It is planned to bring together information regarding the supply of raw material, and the best methods of manufacture, and the ill effects of wasteful methods on the forest and possible remedies for them. Particular attention will also be given to a study of the properties of woods, with the view of recommending substitutes which are more abundant than the species now used for cooperage.

A PARLIAMENTARY paper has been issued containing the report of his majesty's astronomer at the Cape of Good Hope to the secretary of the admiralty for the year 1904. According to an abstract in the London Times the report makes a sympathetic reference to the death of Mr. Frank McClean, to whose generosity the observatory owes the Victoria telescope, with its observatory, dome and many valuable adjuncts. After referring to the work in connection with the new transit circle and the new sidereal clock, the report states that owing to an unfortunate accident, which occurred during the absence of the regular observers, the driving worm and sector of the Victoria telescope were damaged, and the moving portion of the instrument, including the Polar axis and telescope tubes, had to be raised in order to remove the damaged sector. The driving worm of the sector and slow-motion gear were sent to Sir Howard Grubb for alteration and repair early in November. Sir Howard Grubb promised to send off the repaired sector by the end of January, together with an electromotor giving 'quick slow motion' in R.A., a much-needed adjunct for facilitating the placing of the image of the star on the slit. In consequence of this accident the new objective prism had not yet been tested. Details of astronomical observations are given, and the report says that the astronomer has, at the request of the Colonial governments, generally superintended the geodetic survey of South Africa and taken a prominent part in the preparation of arrangements for the establishment of a central office to complete the geodetic and topographic survey of British South Africa south of the Zambesi. The negotiations for that purpose are now nearly completed, and the whole will be placed under the charge of Colonel Morris, whose name has so long and so honorably been connected with the survey of South Africa. Though the admiralty is not connected with this important work, details of the proceedings of the past year are included in this report, as no other record of its progress is issued.

UNIVERSITY AND EDUCATIONAL NEWS.

Dr. ELI McCLISH has resigned the presidency of the University of the Pacific.

MR. C. M. JANSKY, of the Bureau of Standards, formerly of the University of Michigan, has been appointed professor of electrical engineering at the University of Oklahoma.

MR. ALBERT S. RITCHEY, of Indianapolis, Ind., has been appointed assistant professor of railroad engineering at the Worcester Polytechnic Institute.

Dr. J. E. Ives, of the De Forest Wireless Telegraph Company, has been appointed assistant professor of physics in the University of Cincinnati.

DR. W. M. TWITCHELL has been appointed professor of geology in South Carolina College.

The Psychological Bulletin states that Dr. Williston S. Hough, formerly of the University of Minnesota, has been appointed professor of philosophy in George Washington University.

DR. THOMAS W. MITCHELL, instructor in accounting and finance in the University of Pennsylvania, has been appointed assistant professor of finance and accounts in the School of Commerce in New York University to succeed Professor Henry W. Mussey, who goes to Bryn Mawr College.

MR. GEORGE F. LAMB has been appointed professor of biology in Mt. Union College, Ohio.

DR. WILHELM DEEKE has been promoted to a chair of mineralogy at Griefswald.