were not quite up to those of standard kraft papers. The suitability of this method to the production

of boards and low-grade papers, however, seems amply demonstrated.

The recently developed semi-chemical process was tried in an effort to produce a news-grade pulp, but results were indifferently successful. The strength developed by these pulps on beating, however, might be advantageous in their use for building and insulating boards, or in products of a similar character. Small quantities may also be used in connection with other components in newsprint.

## RECOMMENDATIONS.

The commercial practicability of establishing a newsprint industry in New Zealand will depend primarily upon the ability of the local manufacturer to compete with imported newsprint in common use. The New Zealand market is apparently in the undisputed possession of the Canadian and English manufacturers. There exists a preferential tariff of 20 per cent. in their favour, which seems more than adequate to assure them of the market even against depressed Scandinavian prices close to their cost of production. Of the two, the Canadian manufacturer, by virtue of his advantages in raw materials, seems in the better position to dominate the market, and any study of the economics of newsprint-production in New Zealand should presumably be based upon the manufacturing costs and selling-price of Canadian newsprint. Such a study should include woods and market surveys, and in general it may be said that, provided a sufficient supply of wood is available at prices comparable with those paid for Canadian pulpwood, a newsprint development in New Zealand should be reasonably certain of a fair return upon the required capital investment. The co-operator is recommended accordingly to initiate a field study to determine the commercial possibilities of establishing the industry in New Zealand. The available market statistics are taken as evidence that New Zealand should soon be able to absorb an output of 100 long tons daily production, which should be an economical operating unit in a newsprint development.

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## MILL TESTS.

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