Haemolysis of blood agar was greatly decreased by anaerobiosis. Growth in glucose broth was gelatinous with organisms in long chains. The group polysaccharide was destroyed by formamide but not by acid extraction. The strain was sensitive to penicillin, erythromycin, tetracycline, and trimethoprim with sulfamethoxazole, but resistant to streptomycin and bacitracin.

The streptococci were possibly secondary opportunists pathogens; it is unlikely that they reached the lungs by mechanical interference, as no resuscitation was attempted. The necropsy was performed soon after death.

Thirty-two cases of Salmonella haemolysis of blood agar were greatly increased in the Department of Clinical Pathology of the University of Sheffield. A. KENNEDY (Department of Clinical Pathology, Sheffield)

Value of prolonged Incubation of Selenite for the Isolation of Salmonellae from Faeces

K. B. ROGERS and J. E. DOWSE (Children's Hospital, Birmingham)

When investigating the carrier state of children involved in an epidemic of salmonellosis, the faeces of several children failed to grow salmonellae from the subculture made on deoxycholate citrate agar after one day's incubation in selenite, but salmonellae were isolated from some of these selenite specimens incubated for a further four days before they were subcultured. Of the isolations 7.5% were only obtained by the prolonged incubation in selenite.

When this improvement in the isolation rate was appreciated the same technique was adopted for the isolation of salmonellae from routine specimens. The number of salmonellae identified in these specimens has been relatively small but the proportion only isolated by five days' selenite incubation would appear to be about the same as that from the clearance specimens of children who were carriers.

Carcinomas of the Ampulla of Vater and the Duodenum

A. KENNEDY and J. H. BLUMGART (University of Sheffield and Sheffield Royal Infirmary)

Thirty-two cases of carcinoma of the ampulla of Vater and second part of the duodenum have been classified on the basis of their morphology and the results correlated with the clinical histories of the patients.

Two types of tumour were discernible. Ten tumours were polyloid papillary adenocarcinomas arising at the ampulla. Nineteen were adenocarcinomas without a papillary pattern, of which 15 were ampullary and four were duodenal in origin. The three remaining tumours were ampullary but were of mixed histological pattern.

Polyloid lesions in the ampullary region were associated with jaundice which was often intermittent; they were only slightly invasive and the patients came to operation rapidly. The non-papillary tumours were more invasive and more often involved the lymph nodes. They were often associated with pain, were frequently misdiagnosed, and patients only came to laparotomy after a long interval. The duodenal tumours caused vomiting of pyloric type without jaundice. Because of the varying forms of management by different surgeons the data do not provide a clear-cut difference in the survival of the two groups of patients but it is suggested that this pathological classification has clinical relevance and may have prognostic importance.

Ankylosis of the Stapedio-Vestibular Joint

M. I. WRIGHT (University of Manchester)

This joint develops in cartilage and is unique in shape and size. It is a symphysis composed of elastin fibres and cartilage. Age changes may include osteophytes. Adhesions following chronic middle ear infections may leave the joint space unaffected but preventing mobility. Osteosclerosis is apparently a progressive ankylosis, probably inherited as a dominant. A small area of fixation is enough to cause deafness. The peak age of onset is the third decade. The sex-ratio is 1 to 1, but women are more severely affected. Growth in the footplate of the stapes may increase the weight of the bone by 100%. Histopathology of the joint space includes calcification of fibres and cartilage and ossification. The operation specimen shows reactive bone, containing large resorption spaces. These may contain osteoblasts and cells with more primitive features, including the ability to divide, and multicellular osteoclasts. There is plentiful ground substances, which may be basophilic as may the bone. These are the features of a very active lesion. Inactive lesions may contain large spaces in which there are somewhat featureless cells, possibly fibrocytes; the bone is reactive in collagen pattern, but the appearance in polarized light is partly obscured, and the bone is weakly eosinophilic, with few cells. No time relationship exists invariably, except that inactive is presumed to follow active lesions; very active lesions indeed may be present many years after the onset of the disease. Cement lines are not a feature of the lesion. Electron microscopy suggests the presence of chondrocytes and histioocytes in some of the resorption spaces.

Harness: Its Implications for Laboratory Design

D. K. GRAY (Department of Health and Social Security)

Harness is the code name given to a programme for rationalization of NHS hospital planning and design. The name is derived by analogy with the electrical harness used in motor car design. In the hospital design context it represents a multi-purpose street system to which standard (Harness) hospital departments may be attached in a variety of configurations.

Within the Harness concept of hospital planning the street system is adaptable to the majority of site configurations and is thus itself potentially unique to any given situation. The Harness design departments are, however, standardized, albeit in a range of sizes to suit district general hospitals of between 750 and 1200 beds.

Harness does not imply standardized whole hospitals since a wide range of permutations of departmental sizes and departmental relationships is provided for, thus making the total system adaptable to a variety of local requirements.

The Harness concept, at least in its mark I form—hopefully there will be mark IA, IB etc versions later—requires that all hospital departments be accommodated in multiples of 50 feet squares of space arranged in a chequer board fashion, alternate squares being courtyards to provide natural light and ventilation.

The Harness design system recognizes what is frequently unacknowledged in building design, namely that space envelopes are in large measure predetermined by architectural form, and that facility planners must adjust to structural