

diseases of the kidney, *i.e.*, the specific gravity of the whole twenty-four hour's urine. 3. That the decrease of both the solids and the specific gravity bears a direct relationship to the extent of each and every lesion of the kidney. He says it gives more trustworthy information than does the presence or quantity of albumen as to the existence of renal lesion, also as to its extent, progress, probable chronicity, and final progress toward recovery or death. The specific gravity of the urine in functional albuminuria is never below the normal standard. The only exception to this is in complication of chronic Bright's disease with diabetes, when the sugar so raises the specific gravity as to more than balance the lowering of the specific gravity due to renal disease.

Physical Training.

There has been recently formed in London an Association, office 72 Lancaster Street, Borough Road, S. E., known as the Lloyd Association of Great Britain and Ireland, with the Earl of Meath as President and Sir John Lubbock, Vice-President, for the purpose of extending the advantages of the Swedish-Lloyd system of physical training in schools. It is said to be an excellent system of gymnastics; it calls the muscles into play and offers a great variety of movements, so that no one set of muscles is unduly strained. It is arranged to exercise both sides of the body. Planing, sawing, filing, etc., can be done with both hands, so both sides of the body are developed evenly and harmoniously. No other kind of manual work as a school subject has ever combined such training of the hand to general dexterity with due exercise of the whole body.

SURGERY.

The Treatment of Intestinal Obstruction.

Our readers will remember that in the report of the American Medical Congress held at Washington in September, an important and animated discussion on the above subject was introduced by a paper by Prof. N. Senn of Milwaukee. The following is the series of conclusions to which the researches of this illustrious American surgeon point, as given in the *Medical Reporter*.

1. Traumatic stenosis from partial enterectomy and the longitudinal suturing of the wound becomes a source of danger from obstruction or per-

foration in all cases where the lumen of the bowel is reduced more than one-half.

2. Longitudinal suturing of wounds on the mesenteric side of the intestine should never be practiced, as such a procedure is invariably followed by gangrene and perforation by intercepting the vascular supply to the portion of bowel which corresponds to the mesenteric defect.

3. The immediate cause of gangrene in circular constriction of a loop of intestine is due to obstruction of the venous circulation, and takes place first in the majority of cases at a point most remote from the cause of obstruction.

4. On the convex surface of the bowel a defect an inch in width, from injury or operation, can be closed by transverse suturing without causing obstruction by flexion. In such cases the stenosis is subsequently corrected by a compensating bulging or dilatation of the mesenteric side of the bowel.

5. Closing a wound of such dimensions on the mesenteric side of the bowel by transverse suturing may give rise to intestinal obstruction by flexion, and to gangrene and perforation by seriously impairing the arterial supply to, and venous return from, the portion of bowel corresponding with the mesenteric defect.

6. Flexion caused by inflammatory and other extrinsic causes gives rise to intestinal obstruction only in case the functional capacity of the flexed portion of the bowel has been impaired or suspended by the causes which have produced the flexion, or by subsequent pathological conditions which have occurred independently of the flexion.

10. The immediate or direct cause of gangrene of the intussusception is obstruction to the return of venous blood by constriction at the neck of the intussusception.

11. Ileocæcal invagination, when recent, can frequently be reduced by distention of the colon and rectum with water; but this method of reduction must be practiced with the greatest caution and gentleness, as overdistention of the colon and rectum is productive of multiple longitudinal lacerations of the peritoneal coat.

12. The competency of the ileocæcal valve can be overcome only by over-distention of the cæcum and is effected by a mechanical separation of the margins of the valve; consequently, it is imprudent to attempt the treatment of intestinal obstruction beyond the ileocæcal region by injection per rectum.