ADJUSTABLE CATCHBASIN AND MANHOLE COVERS.

The accompanying illustrations show a form of adjustable coverings for catchbasins, manholes, and lampholes for sewerage and similar work.

It frequently happens that to give the proper crown to a street or depth to a gutter, the height of the curbstone above the pavement must vary at different points. In building manholes it is sometimes necessary to split the upper course of brick to adjust the cover to the street grade. In repaving streets or making other changes in the street surface level manhole covers and catchbasin inlet gratings sometimes have to be raised or lowered, or the latter may be required on account of wear in the pavement. Manhole covers, in particular, have a way of getting, or seeming to get, too high or too low in relation to the adjacent pavement, notably in macadam and dirt streets, and shortly after sewers are built and defective backfilling of trenches makes itself evident. Then, too, sewers and their various inlets are frequently built before the street surface is permanently improved.

The adjustable cover in question is simple in both design and operation. It is a combination of a wedge beneath and inclined plane above, or two inclined planes, working on each other, a ratchet at the base of the wedge being employed to prevent slipping. The accompanying illustrations show both a catchbasin and a manhole cover of this type.

Referring to the section through the catchbasin cover, it may be seen that the grate support is separate from and works within the lower shell. The space being limited, the wedge here is moved only 3 ins., causing the grate and its support to rise or fall 3 ins. If still more variation is desired, use is made of the second inclined edge of the wedge, above and parallel with the first. Bringing this wedge into bearing raises the grate 4½ ins. more, and moving the wedge forward, as before, raises the grate another 3 ins., making 6½ ins. in all. Of course, the grate may be lowered by reversing the action just described. The adjustments may be made ½-in. at a time, thus giving 13 different positions. The portion of the cover built into the curb, as well as that fixed in the street, is not disturbed by the changes in level, all the adjustment being in the grate and its support. This presupposes a fixed curb, or curb line, both as to grade and alignment, the changes to be in the exposed portion of the curb, as altered by raising or lowering the street level at the gutter.

No bolts or other fastenings are required, except a temporary bolt in assembling the parts.

The manholes are adjustable to 6 ins. The lower ring, shown in the illustration, is composed of four wedges. A strap or lug on the upper ring engages in a slot and prevents it from slipping.

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