to the bearing block connections on the top and bottom chords. In the original Howe bearing block, it was found that the material of the chord was eventually crushed and destroyed at the plane of contact, owing, of course, to the enormous strain on the braces and rods near the points of support; but as we have seen that the Isometrical principle permits a reduction of 50 per cent. of this strain, it will readily be admitted that this element of safety fully compensates for all such disturbing causes. In packing the chords with oak blocks and keys, the writer is well aware that there is great liability to rot at the planes of junction, by reason of the deleterious acids contained in the natural oak, but being in a position to test the effect of the Burnettizing process, in neutralizing this destructive tendency, the experiment is made, with an eye to its future application to such parts of the truss as may not be subjected to transverse strain. But inasmuch as the annexed plan of bridge was intended merely as an example of the application of the principles involved in the Isometrical system, it will be unnecessary to examine further into practical details, which, after all, must be left to the test of extended experience, and which cannot affect the general conclusions already submitted.