from apex; also gold as well, the teeth having been operated on by dentists of good reputation. Even lower molars of the sixth year series, I would so treat and recall a few that are now doing

good duty and have been for several years.

The "limitations in root treatment and filling," which I contributed a paper in your JOURNAL some years ago upon, are so many, and continue to be, in defiance of all appliances yet invented, that no one can secure success in all cases, and the last resort must be the forceps; and then, when the operator can see all parts of tooth and socket, comes the question of relative value and systemic condition.

J. A. BAZIN, Ormstown, Que.

- 17. Q.—What makes the best investment for plates or bridges where gold soldering is to be done?
- (a) Four things have been commonly used as an investment (with plaster) in soldering teeth on gold, platina, or other metal, each one having its friends. Clean river sand, fine silex, fine soapstone and shreded asbestos. My preference has always been in favor of sand, two-thirds to three-quarters sand to one of plaster. In soldering whole sets, or when much of the arch is enveloped, to prevent warping, I favor, at least, nine-tenths sand for filling the ridge portion. The special advantage of this material is that it is a good conductor and allows the heat to carry well through the mass of investment. Asbestos holds together somewhat better, but it takes much longer to heat up. Silex is apt to fuse on to the tooth, if strong heat is put on a certain point, and soapstone is less of a conductor than either. In the fifties I often cut fine binding wire in half-inch bits, and laid them as a second investment to prevent cracking in special cases, and for full sets had iron hoop rings for the same purpose; but then we had not the appliances that obtain at this time. J. A. BAZIN, Ormstown, Que.
- (b) Equal parts of finely sifted coal ashes and plaster of Paris makes as good investment as I have tried, and is about as cheap and convenient as anything.

R. E. SPARKS, Kingston, Ont.

## Questions.

20. August 28th. Mrs. A. presents with abscess over left central incisor. Tooth good color, medium size gold filling on anterior prox-surface. Right central and lateral had been treated for abscesses. History. Two years ago left central became very sore: