

than of any other recognized class of proteids. It has an unusually low nitrogen and high oxygen content as shown by the subjoined average of the analyses of eleven different preparations.

PHASELIN.	
Carbon .....	51.60
Hydrogen .....	7.02
Nitrogen .....	14.65
Sulphur .....	0.49
Oxygen .....	26.24
	100.00

In addition to these two globulins, the extracts were found to contain an extremely small amount of *protease*.

MAY, 1893.

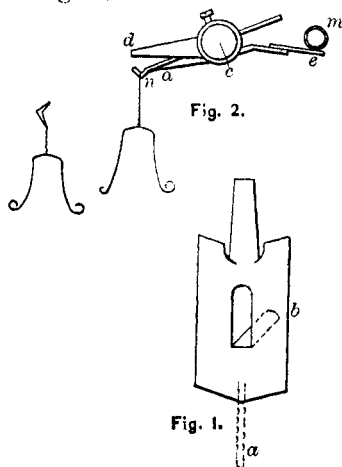
### A SAFETY ATTACHMENT FOR RIDERS.

BY CHAS. E. PARKER, PH.C.

Received August 30, 1894.

SOME years since, an attachment for manipulating the weighing rider of balances was introduced by Verbeck and Peckholdt. The arrangement, devised by the writer, and here described, appears to have some advantages in simplicity, lightness, and adaptability.

It consists of a piece of sheet brass cut in the shape shown in *b*, Fig. 1, to which is soldered a bit of hair-spring from a watch,



and of a light glass rod, *m*, Fig. 3, secured in a position parallel to the beam behind and slightly above it.

The piece of brass, *b*, is bent, as shown in Figs. 2 and 3, to form a sleeve upon the rod, *c*, together with a prong in apposition to the hook by which the rider is usually lifted, *n*, Fig. 2; and an extension, *e*, back under the rod, *m*, which thus limits the rotation of the sleeve and prong in one direction.

The operation is readily understood; the usual hook arrangement being converted into forceps

normally closed by the spring, *a*, thus securing the rider. When, by turning the rod, *c*, the rider is lowered, just before it rests upon the beam, contact between *m* and *e* checks the corresponding motion of the sleeve, thus opening the forceps; continuing

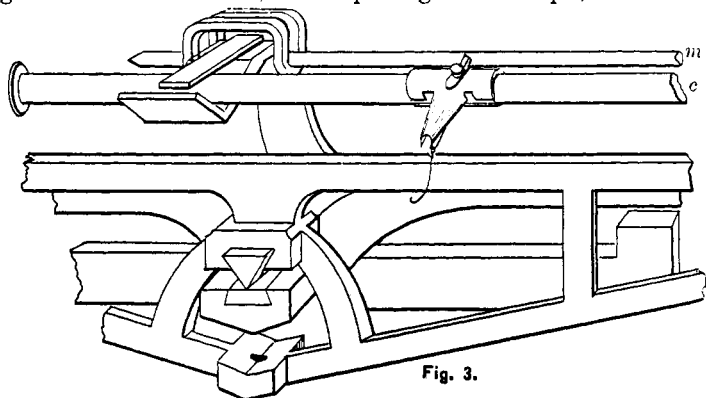


Fig. 3.

the movement, the rider is left hanging free upon the beam. Upon releasing the rod, *c*, the tension of the spring should be sufficient to close the forceps. When, however, it is often desirable to leave the rider upon the beam, by bending its loop, as shown in the side sketch, Fig. 2, this is easily effected.

Not the least advantage of this device is the readiness with which it can be extemporized.

### ON THE ESTIMATION OF PHOSPHORIC ACID BY TITRATION OF THE YELLOW PRECIPITATE.

By B. W. KILGORE.

Received September 15, 1894.

**M**ETHODS based upon the principle of titrating the yellow precipitate with standard alkali have been described by a number of chemists, especially for the estimation of phosphorus in iron and steel and their ores, where it is present in very small quantities. Among them may be mentioned by abstract:

E. Thilo (abstract *J. Anal. Chem.*, 1, part 2, 219, 1887) in the estimation of  $P_2O_5$  in Thomas Slag, precipitates at  $70^\circ C.$  with molybdic solution containing one part molybdic acid, three parts ammonium nitrate, and fifteen parts nitric acid, allows to stand five minutes, filters, washes with twenty per cent.