

But there is a yet more terrible word, with which I must close—viz., “pandenominational.” It reminds one painfully of pandemonium, but whilst the latter is all right linguistically, the former is a cross-breed. *Pan* is all very well as part of a Greek compound. No one objects to a “panorama” or a “pantehnicion;”

but then the word “pan Anglican” was created—not without protest; and “pan-Presbyterian” followed; and I suppose we may look in time for a crop of Nonconformist “pans.” But why say “pandenominational” when a far better and pleasanter word has been invented—viz., “interdenominational?”

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FORM II

PHYSICS.

1. Take a board about 3 metres long with a groove down the centre in which a marble will roll. Elevate the board so that the marble will continue to roll downwards when once started. Suspend a weight by means of a string 993 millimetres long which will beat seconds approximately. Now, while one person counts the seconds from the pendulum, let another mark the distances passed over by the marble in the first, second, and third seconds respectively. It will be found that if the distance passed over from rest in the first second be 2 centimetres, that for the second second will be 6 centimetres, and for the third second 10 centimetres, etc., for the other seconds, the distances being proportional to the odd numbers 1, 3, 5, 7, etc.

If the space passed over in the first second be 2 cms., then the acceleration is 4 cms. per sec. and the velocity at the end of the first

second 4 cms., at the end of the second second 8 cms.

To find the average velocity for any second add the initial velocity and the final together and take half the sum. The motion of the marble will be accelerated from rest, and in a straight line if no force intervene to change its motion.

2. (a) Energy of bodily onward motion—a moving train, a person walking.

Energy of bodily vibration—the pendulum.

Energy of molecular vibration—heat.

Energy of electric current—as shown in the electric motor.

2. (b) Energy of bodily onward motion to molecular energy or heat.

3. (a) Since the water remains on the glass we infer that there is a force acting between the water and the glass. This force is called adhesion.

Since the drops of water take a rounded shape, we infer that there is a force acting between the molecules of the water. This force is called cohesion.

3. (b) *Ductility.*—Take a small tube of glass and heat it in a gas flame. After a while it can be drawn out into fine threads. Glass is, therefore, said to be ductile.

Tenacity.—Attempt to pull a rope apart by attaching one end to the wall of the room and pulling on the other. The resistance the rope offers