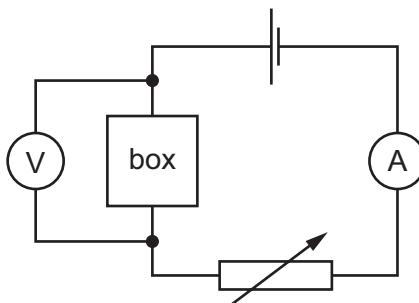
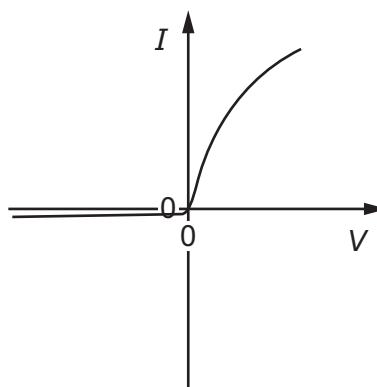


- 35 A box containing two electrical components is connected into a circuit.



The variable resistor is adjusted and measurements are taken to determine the  $I$ - $V$  characteristic for the box, as shown.



Which arrangement of two electrical components in the box would create the best fit to the measured  $I$ - $V$  characteristic?

- A a filament lamp and a fixed resistor in parallel
- B a filament lamp and a fixed resistor in series
- C a semiconductor diode and a filament lamp in parallel
- D a semiconductor diode and a filament lamp in series