



**Fig. 63 Stromberg Carburettor on B 20 B (USA)**

- |   |                                       |   |
|---|---------------------------------------|---|
| 1. Cold-air hose                            | 9. Temperature compensator            | 16. Vacuum hose for brake servo             |
| 2. Air preheating flap                      | 10. Choke wire                        | 17. Hose for crankcase gases                |
| 3. Warm-air hose                            | 11. Throttle stop screw               | 18. Idle trimming screw                     |
| 4. Temperature compensator                  | 12. Manifold with pre-heating chamber | 19. Throttle spindle for secondary throttle |
| 5. Clamp for aircleaner                     | 13. Idle trimming screw               | 20. Throttle spindle for primary throttle   |
| 6. Aircleaner                               | 14. Throttle control                  | 21. Throttle by-pass valve                  |
| 7. Fresh-air hose for crankcase ventilation | 15. Vacuum hose for distributor       |   |
| 8. Fuel hoses                               |                                       |   |

## ZENITH-STROMBERG CARBURETTOR

The carburettor for the B 20 A engine is shown in Figs. 64 and 65. It has been designed with a view to obtaining cleaner exhaust gases by means of an exhaust emission control system.

It is provided with a fixed jet, pressed into the carburettor housing, the fuel flow orifice area of which is varied by means of a movable tapered needle. The position of the needle is determined by the carburettor housing vacuum operating an air valve in which the needle is fitted in a spring-loaded suspension. The spring force always presses the needle against the same side of the jet, and this ensures an accurately controlled fuel flow through the jet.

The carburettor consists of three main parts of light-alloy, the middle part of which comprises the carburettor housing. The lower section is made up of a floatchamber, which encloses the jet and the float. The upper section consists of a suction chamber cover, which forms a suction chamber together with a diaphragm fixed in the air valve. The suction chamber regulates the air valve lift and thereby the location of the needle in the jet. By means of channels in the valve, the suction chamber is linked to the space between the carburettor throttle and valve.

The carburettor is fitted with a temperature compensator (8, Fig. 65). This is constructed as an air valve regulated by the carburettor temperature and maintains the fuel-air mixture constant irrespective of the fuel temperature.