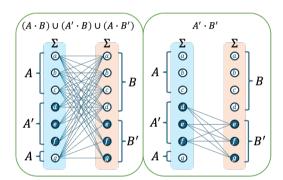


**Fig. 1** Let Σ =  $\{a, b, c, d, e, f, g\}$ ,  $Q = \{q_6, q_7, q_8, q_9, q_{10}\}$ . From these figures, we get  $\ell_A = 1$ ,  $\ell_B = 1$ ,  $Q^{(\perp,\perp)} = Q^{(\perp,\cdot)} = Q^{(\cdot,\perp)} = \emptyset$ , and  $Q^{(\cdot,\cdot)} = Q$ .



**Fig. 2** In the left figure, we aggregate all of the edges appearing in Fig. 1. From Fig. 1 and this right figure, we get  $Q_1^{(\cdot,\cdot)}=\{q_6,q_7,q_8,q_9\}$  and  $Q_2^{(\cdot,\cdot)}=\{q_{10}\}$ . From Proposition ??, even if the string  $dg\in A'\cdot B'$  satisfies  $p\{x:=gd\} \preceq q_{10}$ , it does not imply that  $p\{x:=xy\} \preceq q_{10}$ .