Suppose $K$ is a field of characteristic $0$, $K_a$ is its algebraic closure, $p$ is an odd prime. Suppose, $f(x) \in K[x]$ is a polynomial of degree $n \geq 5$ without multiple roots. Let us consider a curve $C : y^p = f(x)$ and its jacobian $J(C)$. It is known that the ring $\text{End}(J(C))$ of all $K_a$-endomorphisms of $J(C)$ contains the ring $\mathbb{Z}[\zeta_p]$ of integers in the $p$th cyclotomic field (generated by obvious automorphisms of $C$).

We prove that

$$\text{End}(J(C)) = \mathbb{Z}[\zeta_p]$$

if the Galois group of $f$ over $K$ is either the symmetric group $S_n$ or the alternating group $A_n$.

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